OMR Scanner Test Report

ALL 325 CASES PASSED

2026-07-15T16:40:29.397Z · 178810 assertions passed · 0 failed

#	CASE	PROFILE	STATUS
1	20q 5-id 1-col no-section · pristine	`pristine`	PASS
2	50q 6-id 2-col with-section · pristine	`pristine`	PASS
3	100q 10-id 4-col with-section · pristine	`pristine`	PASS
4	30q · no Key zone (hasFormCode=false)	`pristine`	PASS
5	20q · no section zone (hasSectionSelector=false)	`pristine`	PASS
6	25q · no section AND no Key zones	`pristine`	PASS
7	30q · no Key + mild perspective	`perspective_mild`	PASS
8	50q · 10 blank questions	`pristine`	PASS
9	50q · 10 blank questions + out of focus	`out_of_focus`	PASS
10	50q · 10 blank questions + jpeg q30	`jpeg_q30`	PASS
11	50q · 10 blank questions + steep keystone	`perspective_steep`	PASS
12	boundary · too-small stroke below 0.47 reads blank	`pristine`	PASS
13	boundary · weak crowded fill reads unclear	`pristine`	PASS
14	boundary · strong enough fill reads selected	`pristine`	PASS
15	50q · multi-marked questions	`pristine`	PASS
16	50q · multi-marked + curled page MILD	`curled_page_mild`	PASS
17	50q · multi-marked + rotated 3°	`rotated_3deg`	PASS
18	50q · multi-marked + jpeg q50	`jpeg_q50`	PASS
19	50q · triple-marked questions	`pristine`	PASS
20	50q · uneven multi-fill (partial second mark)	`pristine`	PASS
21	50q · multi-answer key (OR mode)	`pristine`	PASS
22	50q · multi-answer key (AND mode)	`pristine`	PASS
23	50q · mixed (wrong + blank + multi)	`pristine`	PASS
24	50q · mixed + lighting vignette	`lighting_vignette`	PASS
25	100q · 10-id, first 4 digits only	`pristine`	PASS
26	100q · 10-id, last 4 digits only	`pristine`	PASS
27	50q · section left blank	`pristine`	PASS
28	40-printed / 10-used questions	`pristine`	PASS
29	100q · 10-id first 4 + lighting vignette	`lighting_vignette`	PASS
30	40-printed / 10-used + mild perspective	`perspective_mild`	PASS
31	50q · rotated -3°	`rotated_neg3deg`	PASS
32	50q · rotated -8°	`rotated_neg8deg`	PASS
33	50q · rotated 3°	`rotated_3deg`	PASS
34	50q · rotated 8°	`rotated_8deg`	PASS
35	50q · mild perspective	`perspective_mild`	PASS
36	50q · strong perspective	`perspective_strong`	PASS
37	50q · steep keystone (phone low angle)	`perspective_steep`	PASS
38	50q · combined tilt + rot	`tilt_combined`	PASS
39	50q · lighting gradient	`lighting_gradient`	PASS
40	50q · lighting HEAVY gradient	`lighting_heavy_gradient`	PASS
41	50q · lighting global dark	`lighting_global_dark`	PASS
42	50q · lighting vignette	`lighting_vignette`	PASS
43	50q · low res (700px)	`low_res`	PASS
44	50q · very low res (520px)	`very_low_res`	PASS
45	50q · jpeg q50	`jpeg_q50`	PASS
46	50q · jpeg q30	`jpeg_q30`	PASS
47	50q · scene centered	`scene_center`	PASS
48	50q · scene top-left	`scene_top_left`	PASS
49	50q · scene bottom-right	`scene_bottom_right`	PASS
50	50q · scene rotated in frame	`scene_rotated`	PASS
51	50q · scene perspective	`scene_perspective`	PASS
52	50q · scene cluttered dark	`scene_cluttered_dark`	PASS
53	50q · scene small sheet	`scene_small_centered`	PASS
54	50q · upside down (180°)	`rotated_180deg`	PASS
55	50q · sideways right (+90°)	`rotated_90deg`	PASS
56	50q · sideways left (-90°)	`rotated_neg90deg`	PASS
57	50q · landscape sheet in landscape frame	`scene_landscape_frame`	PASS
58	50q · landscape sheet in portrait frame	`scene_landscape_in_portrait`	PASS
59	50q · combo rotation + gradient + jpeg	`rotated_3deg → lighting_gradient → jpeg_q50`	PASS
60	50q · combo perspective + vignette	`perspective_mild → lighting_vignette`	PASS
61	50q · combo -rotation + low res + jpeg	`rotated_neg3deg → low_res → jpeg_q50`	PASS
62	50q · combo perspective + gradient + jpeg	`perspective_mild → lighting_gradient → jpeg_q50`	PASS
63	50q · mixed + rotation + gradient + jpeg	`rotated_3deg → lighting_gradient → jpeg_q50`	PASS
64	50q · light pencil fills	`pristine`	PASS
65	50q · low toner print	`pristine`	PASS
66	50q · eraser smudges	`pristine`	PASS
67	50q · glare hotspot	`glare_hotspot`	PASS
68	50q · damaged fiducial (TL)	`damaged_fiducial_tl`	PASS
69	50q · out of focus (gaussian)	`out_of_focus`	PASS
70	50q · streaky printer bands	`pristine`	PASS
71	50q · fold crease line	`fold_crease`	PASS
72	50q · photocopy-of-a-photocopy	`pristine`	PASS
73	50q · ballpoint pen fill	`pristine`	PASS
74	50q · ink bleed (over-dark print)	`pristine`	PASS
75	50q · three-hole punch holes	`three_hole_punch`	PASS
76	50q · motion blur (horizontal)	`motion_blur`	PASS
77	50q · show-through from back of sheet	`show_through`	PASS
78	50q · over-fill bleed past edge	`pristine`	PASS
79	50q · partial (under-) fill	`pristine`	PASS
80	50q · curled page (non-planar)	`curled_page`	PASS
81	50q · curled page convex (bulged)	`curled_page_convex`	PASS
82	50q · curled page MILD (lying on soft surface)	`curled_page_mild`	PASS
83	50q · curled page horizontal axis	`curled_page_horizontal`	PASS
84	50q · curled page horizontal axis (convex)	`curled_page_horizontal_convex`	PASS
85	50q · curled page diagonal axis	`curled_page_diagonal`	PASS
86	50q · mixed pencil darkness	`pristine`	PASS
87	50q · wrinkled / crumpled sheet	`wrinkled`	PASS
88	50q · torn corner (TR fiducial missing)	`torn_corner_tr`	PASS
89	50q · dog-eared corner (BL)	`dog_eared_bl`	PASS
90	50q · bent corner (TR, mild)	`bent_corner_tr`	PASS
91	50q · bent corner (TR, strong)	`bent_corner_tr_strong`	PASS
92	50q · bent corner (TL, mild)	`bent_corner_tl`	PASS
93	50q · bent corner (BL, mild)	`bent_corner_bl`	PASS
94	50q · bent corner (BR, mild)	`bent_corner_br`	PASS
95	50q · hand / arm shadow draped over sheet	`hand_shadow`	PASS
96	50q · partial bubble-area shadow (filled rows stay clear)	`partial_bubble_shadow`	PASS
97	50q · blank rows under partial bubble shadow stay blank	`partial_bubble_shadow`	PASS
98	50q · sheet on dark fabric couch	`scene_fabric_couch`	PASS
99	50q · real photo mimic 1: fabric couch + mild tilt + bent TR	`perspective_mild → rotated_3deg → curled_page_mild → bent_corner_tr → scene_fabric_couch`	PASS
100	50q · real photo mimic 2: fabric couch + hand shadow	`hand_shadow → rotated_neg3deg → scene_fabric_couch`	PASS

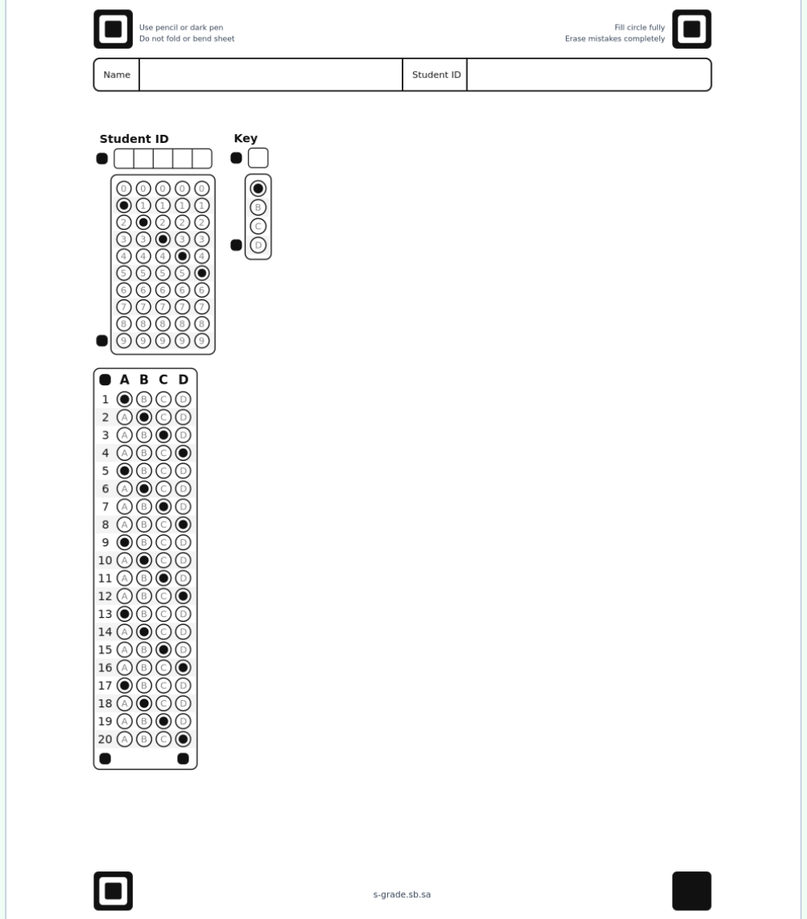
#	CASE	PROFILE	STATUS
101	50q · stacked curl horizontal + bent TR + rotation	`curled_page_horizontal → bent_corner_tr → rotated_3deg`	PASS
102	50q · stacked curl diagonal + hand shadow	`curled_page_diagonal → hand_shadow`	PASS
103	50q · drum-stripe ghosting print	`pristine`	PASS
104	[NEG] blank black frame	`pristine`	REJECTED
105	[NEG] blank white frame	`pristine`	REJECTED
106	[NEG] uniform mid-gray frame	`pristine`	REJECTED
107	[NEG] random pixel noise (TV static)	`pristine`	REJECTED
108	[NEG] cluttered desk (no sheet in frame)	`pristine`	REJECTED
109	[NEG] plain printed text page	`pristine`	REJECTED
110	[NEG] calendar / spreadsheet grid	`pristine`	REJECTED
111	[NEG] sheet with all 4 fiducials masked	`pristine`	REJECTED
112	[NEG] only TL corner of sheet in frame	`pristine`	REJECTED
113	[NEG] different-vendor bubble sheet (no fiducials)	`pristine`	REJECTED
114	[NEG] sheet too far (~3% of frame)	`pristine`	REJECTED
115	[NEG] sheet too close (fiducials cropped)	`pristine`	REJECTED
116	[NEG] checkerboard calibration pattern	`pristine`	REJECTED
117	30q · wide margins (H=20,V=30) · pristine	`pristine`	PASS
118	30q · wide margins · rotation 3deg	`rotated_3deg`	PASS
119	30q · wide margins · perspective mild	`perspective_mild`	PASS
120	30q · wide margins · lighting gradient + jpeg q50	`lighting_gradient → jpeg_q50`	PASS
121	60q · split margins (H=5,V=25) · pristine	`pristine`	PASS
122	60q · split margins · rotation -3deg	`rotated_neg3deg`	PASS
123	60q · split margins · perspective strong	`perspective_strong`	PASS
124	50q · no alt rows · pristine	`pristine`	PASS
125	50q · no alt rows · rotation 8deg	`rotated_8deg`	PASS
126	50q · no alt rows · lighting vignette	`lighting_vignette`	PASS
127	50q · no alt rows · out of focus	`out_of_focus`	PASS
128	40q · mixed groups (A-D + A-F + T,F) · pristine	`pristine`	PASS
129	40q · mixed groups · rotation 3deg	`rotated_3deg`	PASS
130	40q · mixed groups · perspective mild + lighting gradient	`perspective_mild → lighting_gradient`	PASS
131	40q · mixed groups · jpeg q30	`jpeg_q30`	PASS
132	40q · mixed groups · scene cluttered dark	`scene_cluttered_dark`	PASS
133	25q · custom zone titles · pristine	`pristine`	PASS
134	25q · custom zone titles · rotation -3deg + jpeg	`rotated_neg3deg → jpeg_q50`	PASS
135	20q · custom header fields · pristine	`pristine`	PASS
136	20q · custom header fields · perspective mild	`perspective_mild`	PASS
137	60q · mixed groups large (A-D + A-C + T,F) · pristine	`pristine`	PASS
138	60q · mixed groups large · tilt combined	`tilt_combined`	PASS
139	60q · mixed groups large · lighting heavy gradient	`lighting_heavy_gradient`	PASS
140	100q · fully full (A-E, 3-col key A-G, 4 hdr) · pristine	`pristine`	PASS
141	100q · fully full · rotation 3deg	`rotated_3deg`	PASS
142	100q · fully full · perspective mild + jpeg q50	`perspective_mild → jpeg_q50`	PASS
143	100q · fully full · multi-char form "ABF" · pristine	`pristine`	PASS
144	100q · fully full · multi-char form "ABF" · rotation 3deg	`rotated_3deg`	PASS
145	20q · per-column form scheme · form "C7" of 40 · pristine	`pristine`	PASS
146	20q · per-column form scheme · form "C7" of 40 · rotation 3deg	`rotated_3deg`	PASS
147	20q · per-column form scheme · one-per-column is not multi-fill	`pristine`	PASS
148	20q · Arabic-printed 2-col key · canonical form "BA" · pristine	`pristine`	PASS
149	10q · smaaaall (margin 70, no section/key) · pristine	`pristine`	PASS
150	10q · smaaaall · rotation -3deg	`rotated_neg3deg`	PASS
151	10q · smaaaall · lighting gradient	`lighting_gradient`	PASS
152	18q · alternating (A-D/T-F/A-E/POKJ/A-D) · pristine	`pristine`	PASS
153	18q · alternating · rotation 3deg	`rotated_3deg`	PASS
154	18q · alternating · perspective mild + lighting gradient	`perspective_mild → lighting_gradient`	PASS
155	15q · short quiz (margin 30/64, 2-col A-H key) · pristine	`pristine`	PASS
156	15q · short quiz · rotation 3deg	`rotated_3deg`	PASS
157	15q · short quiz · perspective mild + lighting vignette	`perspective_mild → lighting_vignette`	PASS
158	50q · crop square (1:1) — sheet fills short axis	`crop_square_tight`	PASS
159	50q · crop landscape 4:3 — sheet rotated 90°	`crop_4_3_landscape_tight`	PASS
160	50q · crop landscape 16:9 — sheet rotated 90°	`crop_16_9_landscape_tight`	PASS
161	50q · crop portrait 3:4 — sheet edge-to-edge horizontally	`crop_3_4_portrait_tight`	PASS
162	15q · short quiz · crop square (1:1)	`crop_square_tight`	PASS
163	15q · short quiz · cropped to paper edges (no margin)	`crop_to_paper_edges`	PASS
164	15q · short quiz · cropped to fiducial quad (edge fiducials)	`crop_to_fiducial_quad`	PASS
165	50q · mid · cropped to fiducial quad (edge fiducials)	`crop_to_fiducial_quad`	PASS
166	10q · custom-labels (SID 1-5, sec ›-Í, key X-Z) · pristine	`pristine`	PASS
167	alerts · form code shaded on disabled row (F on A-only quiz)	`pristine`	PASS
168	alerts · form code has multiple filled bubbles	`pristine`	PASS
169	alerts · student ID has a missing digit in the middle	`pristine`	PASS
170	alerts · student ID has multiple filled bubbles	`pristine`	PASS
171	alerts · question Q3 has multiple filled bubbles	`pristine`	PASS
172	alerts · question has unclear (unkeyed) mark	`pristine`	PASS
173	[AR] 20q 5-id 1-col no-section · pristine	`pristine`	PASS
174	[AR] 50q 6-id 2-col with-section · pristine	`pristine`	PASS
175	[AR] 100q 10-id 4-col with-section · pristine	`pristine`	PASS
176	[AR] 30q · no Key zone (hasFormCode=false)	`pristine`	PASS
177	[AR] 20q · no section zone (hasSectionSelector=false)	`pristine`	PASS
178	[AR] 25q · no section AND no Key zones	`pristine`	PASS
179	[AR] 30q · no Key + mild perspective	`perspective_mild`	PASS
180	[AR] 50q · 10 blank questions	`pristine`	PASS
181	[AR] 50q · 10 blank questions + out of focus	`out_of_focus`	PASS
182	[AR] 50q · 10 blank questions + jpeg q30	`jpeg_q30`	PASS
183	[AR] 50q · 10 blank questions + steep keystone	`perspective_steep`	PASS
184	[AR] boundary · too-small stroke below 0.47 reads blank	`pristine`	PASS
185	[AR] boundary · weak crowded fill reads unclear	`pristine`	PASS
186	[AR] boundary · strong enough fill reads selected	`pristine`	PASS
187	[AR] 50q · multi-marked questions	`pristine`	PASS
188	[AR] 50q · multi-marked + curled page MILD	`curled_page_mild`	PASS
189	[AR] 50q · multi-marked + rotated 3°	`rotated_3deg`	PASS
190	[AR] 50q · multi-marked + jpeg q50	`jpeg_q50`	PASS
191	[AR] 50q · triple-marked questions	`pristine`	PASS
192	[AR] 50q · uneven multi-fill (partial second mark)	`pristine`	PASS
193	[AR] 50q · multi-answer key (OR mode)	`pristine`	PASS
194	[AR] 50q · multi-answer key (AND mode)	`pristine`	PASS
195	[AR] 50q · mixed (wrong + blank + multi)	`pristine`	PASS
196	[AR] 50q · mixed + lighting vignette	`lighting_vignette`	PASS
197	[AR] 100q · 10-id, first 4 digits only	`pristine`	PASS
198	[AR] 100q · 10-id, last 4 digits only	`pristine`	PASS
199	[AR] 50q · section left blank	`pristine`	PASS
200	[AR] 40-printed / 10-used questions	`pristine`	PASS
201	[AR] 100q · 10-id first 4 + lighting vignette	`lighting_vignette`	PASS
202	[AR] 40-printed / 10-used + mild perspective	`perspective_mild`	PASS
203	[AR] 50q · rotated -3°	`rotated_neg3deg`	PASS
204	[AR] 50q · rotated -8°	`rotated_neg8deg`	PASS

#	CASE	PROFILE	STATUS
205	[AR] 50q · rotated 3°	`rotated_3deg`	PASS
206	[AR] 50q · rotated 8°	`rotated_8deg`	PASS
207	[AR] 50q · mild perspective	`perspective_mild`	PASS
208	[AR] 50q · strong perspective	`perspective_strong`	PASS
209	[AR] 50q · steep keystone (phone low angle)	`perspective_steep`	PASS
210	[AR] 50q · combined tilt + rot	`tilt_combined`	PASS
211	[AR] 50q · lighting gradient	`lighting_gradient`	PASS
212	[AR] 50q · lighting HEAVY gradient	`lighting_heavy_gradient`	PASS
213	[AR] 50q · lighting global dark	`lighting_global_dark`	PASS
214	[AR] 50q · lighting vignette	`lighting_vignette`	PASS
215	[AR] 50q · low res (700px)	`low_res`	PASS
216	[AR] 50q · very low res (520px)	`very_low_res`	PASS
217	[AR] 50q · jpeg q50	`jpeg_q50`	PASS
218	[AR] 50q · jpeg q30	`jpeg_q30`	PASS
219	[AR] 50q · scene centered	`scene_center`	PASS
220	[AR] 50q · scene top-left	`scene_top_left`	PASS
221	[AR] 50q · scene bottom-right	`scene_bottom_right`	PASS
222	[AR] 50q · scene rotated in frame	`scene_rotated`	PASS
223	[AR] 50q · scene perspective	`scene_perspective`	PASS
224	[AR] 50q · scene cluttered dark	`scene_cluttered_dark`	PASS
225	[AR] 50q · scene small sheet	`scene_small_centered`	PASS
226	[AR] 50q · upside down (180°)	`rotated_180deg`	PASS
227	[AR] 50q · sideways right (+90°)	`rotated_90deg`	PASS
228	[AR] 50q · sideways left (-90°)	`rotated_neg90deg`	PASS
229	[AR] 50q · landscape sheet in landscape frame	`scene_landscape_frame`	PASS
230	[AR] 50q · landscape sheet in portrait frame	`scene_landscape_in_portrait`	PASS
231	[AR] 50q · combo rotation + gradient + jpeg	`rotated_3deg → lighting_gradient → jpeg_q50`	PASS
232	[AR] 50q · combo perspective + vignette	`perspective_mild → lighting_vignette`	PASS
233	[AR] 50q · combo -rotation + low res + jpeg	`rotated_neg3deg → low_res → jpeg_q50`	PASS
234	[AR] 50q · combo perspective + gradient + jpeg	`perspective_mild → lighting_gradient → jpeg_q50`	PASS
235	[AR] 50q · mixed + rotation + gradient + jpeg	`rotated_3deg → lighting_gradient → jpeg_q50`	PASS
236	[AR] 50q · light pencil fills	`pristine`	PASS
237	[AR] 50q · low toner print	`pristine`	PASS
238	[AR] 50q · eraser smudges	`pristine`	PASS
239	[AR] 50q · glare hotspot	`glare_hotspot`	PASS
240	[AR] 50q · damaged fiducial (TL)	`damaged_fiducial_tl`	PASS
241	[AR] 50q · out of focus (gaussian)	`out_of_focus`	PASS
242	[AR] 50q · streaky printer bands	`pristine`	PASS
243	[AR] 50q · fold crease line	`fold_crease`	PASS
244	[AR] 50q · photocopy-of-a-photocopy	`pristine`	PASS
245	[AR] 50q · ballpoint pen fill	`pristine`	PASS
246	[AR] 50q · ink bleed (over-dark print)	`pristine`	PASS
247	[AR] 50q · three-hole punch holes	`three_hole_punch`	PASS
248	[AR] 50q · motion blur (horizontal)	`motion_blur`	PASS
249	[AR] 50q · show-through from back of sheet	`show_through`	PASS
250	[AR] 50q · over-fill bleed past edge	`pristine`	PASS
251	[AR] 50q · partial (under-) fill	`pristine`	PASS
252	[AR] 50q · curled page (non-planar)	`curled_page`	PASS
253	[AR] 50q · curled page convex (bulged)	`curled_page_convex`	PASS
254	[AR] 50q · curled page MILD (lying on soft surface)	`curled_page_mild`	PASS
255	[AR] 50q · curled page horizontal axis	`curled_page_horizontal`	PASS
256	[AR] 50q · curled page horizontal axis (convex)	`curled_page_horizontal_convex`	PASS
257	[AR] 50q · curled page diagonal axis	`curled_page_diagonal`	PASS
258	[AR] 50q · mixed pencil darkness	`pristine`	PASS
259	[AR] 50q · wrinkled / crumpled sheet	`wrinkled`	PASS
260	[AR] 50q · torn corner (TR fiducial missing)	`torn_corner_tr`	PASS
261	[AR] 50q · dog-eared corner (BL)	`dog_eared_bl`	PASS
262	[AR] 50q · bent corner (TR, mild)	`bent_corner_tr`	PASS
263	[AR] 50q · bent corner (TR, strong)	`bent_corner_tr_strong`	PASS
264	[AR] 50q · bent corner (TL, mild)	`bent_corner_tl`	PASS
265	[AR] 50q · bent corner (BL, mild)	`bent_corner_bl`	PASS
266	[AR] 50q · bent corner (BR, mild)	`bent_corner_br`	PASS
267	[AR] 50q · hand / arm shadow draped over sheet	`hand_shadow`	PASS
268	[AR] 50q · partial bubble-area shadow (filled rows stay clear)	`partial_bubble_shadow`	PASS
269	[AR] 50q · blank rows under partial bubble shadow stay blank	`partial_bubble_shadow`	PASS
270	[AR] 50q · sheet on dark fabric couch	`scene_fabric_couch`	PASS
271	[AR] 50q · real photo mimic 1: fabric couch + mild tilt + bent TR	`perspective_mild → rotated_3deg → curled_page_mild → bent_corner_tr → scene_fabric_couch`	PASS
272	[AR] 50q · real photo mimic 2: fabric couch + hand shadow	`hand_shadow → rotated_neg3deg → scene_fabric_couch`	PASS
273	[AR] 50q · stacked curl horizontal + bent TR + rotation	`curled_page_horizontal → bent_corner_tr → rotated_3deg`	PASS
274	[AR] 50q · stacked curl diagonal + hand shadow	`curled_page_diagonal → hand_shadow`	PASS
275	[AR] 50q · drum-stripe ghosting print	`pristine`	PASS
276	[AR] 30q · wide margins (H=20,V=30) · pristine	`pristine`	PASS
277	[AR] 30q · wide margins · rotation 3deg	`rotated_3deg`	PASS
278	[AR] 30q · wide margins · perspective mild	`perspective_mild`	PASS
279	[AR] 30q · wide margins · lighting gradient + jpeg q50	`lighting_gradient → jpeg_q50`	PASS
280	[AR] 60q · split margins (H=5,V=25) · pristine	`pristine`	PASS
281	[AR] 60q · split margins · rotation -3deg	`rotated_neg3deg`	PASS
282	[AR] 60q · split margins · perspective strong	`perspective_strong`	PASS
283	[AR] 50q · no alt rows · pristine	`pristine`	PASS
284	[AR] 50q · no alt rows · rotation 8deg	`rotated_8deg`	PASS
285	[AR] 50q · no alt rows · lighting vignette	`lighting_vignette`	PASS
286	[AR] 50q · no alt rows · out of focus	`out_of_focus`	PASS
287	[AR] 40q · mixed groups (A-D + A-F + T,F) · pristine	`pristine`	PASS
288	[AR] 40q · mixed groups · rotation 3deg	`rotated_3deg`	PASS
289	[AR] 40q · mixed groups · perspective mild + lighting gradient	`perspective_mild → lighting_gradient`	PASS
290	[AR] 40q · mixed groups · jpeg q30	`jpeg_q30`	PASS
291	[AR] 40q · mixed groups · scene cluttered dark	`scene_cluttered_dark`	PASS
292	[AR] 25q · custom zone titles · pristine	`pristine`	PASS
293	[AR] 25q · custom zone titles · rotation -3deg + jpeg	`rotated_neg3deg → jpeg_q50`	PASS
294	[AR] 20q · custom header fields · pristine	`pristine`	PASS
295	[AR] 20q · custom header fields · perspective mild	`perspective_mild`	PASS
296	[AR] 60q · mixed groups large (A-D + A-C + T,F) · pristine	`pristine`	PASS
297	[AR] 60q · mixed groups large · tilt combined	`tilt_combined`	PASS
298	[AR] 60q · mixed groups large · lighting heavy gradient	`lighting_heavy_gradient`	PASS
299	[AR] 100q · fully full (A-E, 3-col key A-G, 4 hdr) · pristine	`pristine`	PASS
300	[AR] 100q · fully full · rotation 3deg	`rotated_3deg`	PASS
301	[AR] 100q · fully full · perspective mild + jpeg q50	`perspective_mild → jpeg_q50`	PASS
302	[AR] 100q · fully full · multi-char form "ABF" · pristine	`pristine`	PASS
303	[AR] 100q · fully full · multi-char form "ABF" · rotation 3deg	`rotated_3deg`	PASS
304	[AR] 20q · per-column form scheme · form "C7" of 40 · pristine	`pristine`	PASS
305	[AR] 20q · per-column form scheme · form "C7" of 40 · rotation 3deg	`rotated_3deg`	PASS
306	[AR] 20q · per-column form scheme · one-per-column is not multi-fill	`pristine`	PASS
307	[AR] 20q · Arabic-printed 2-col key · canonical form "BA" · pristine	`pristine`	PASS
308	[AR] 10q · smaaaall (margin 70, no section/key) · pristine	`pristine`	PASS

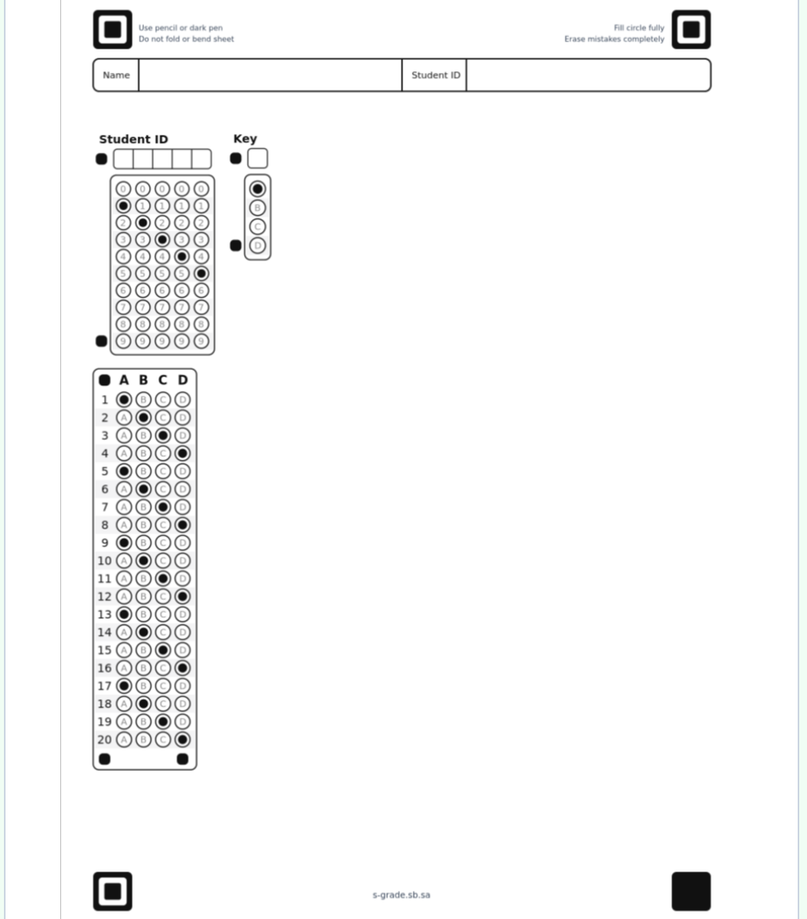
#	CASE	PROFILE	STATUS
309	[AR] 10q · smaaaall · rotation -3deg	`rotated_neg3deg`	PASS
310	[AR] 10q · smaaaall · lighting gradient	`lighting_gradient`	PASS
311	[AR] 18q · alternating (A-D/T-F/A-E/POKJ/A-D) · pristine	`pristine`	PASS
312	[AR] 18q · alternating · rotation 3deg	`rotated_3deg`	PASS
313	[AR] 18q · alternating · perspective mild + lighting gradient	`perspective_mild → lighting_gradient`	PASS
314	[AR] 15q · short quiz (margin 30/64, 2-col A-H key) · pristine	`pristine`	PASS
315	[AR] 15q · short quiz · rotation 3deg	`rotated_3deg`	PASS
316	[AR] 15q · short quiz · perspective mild + lighting vignette	`perspective_mild → lighting_vignette`	PASS
317	[AR] 50q · crop square (1:1) — sheet fills short axis	`crop_square_tight`	PASS
318	[AR] 50q · crop landscape 4:3 — sheet rotated 90°	`crop_4_3_landscape_tight`	PASS
319	[AR] 50q · crop landscape 16:9 — sheet rotated 90°	`crop_16_9_landscape_tight`	PASS
320	[AR] 50q · crop portrait 3:4 — sheet edge-to-edge horizontally	`crop_3_4_portrait_tight`	PASS
321	[AR] 15q · short quiz · crop square (1:1)	`crop_square_tight`	PASS
322	[AR] 15q · short quiz · cropped to paper edges (no margin)	`crop_to_paper_edges`	PASS
323	[AR] 15q · short quiz · cropped to fiducial quad (edge fiducials)	`crop_to_fiducial_quad`	PASS
324	[AR] 50q · mid · cropped to fiducial quad (edge fiducials)	`crop_to_fiducial_quad`	PASS
325	[AR] 10q · custom-labels (SID 1-5, sec ɔ-Í, key X-Z) · pristine	`pristine`	PASS

20q 5-id 1-col no-section · pristine PASS

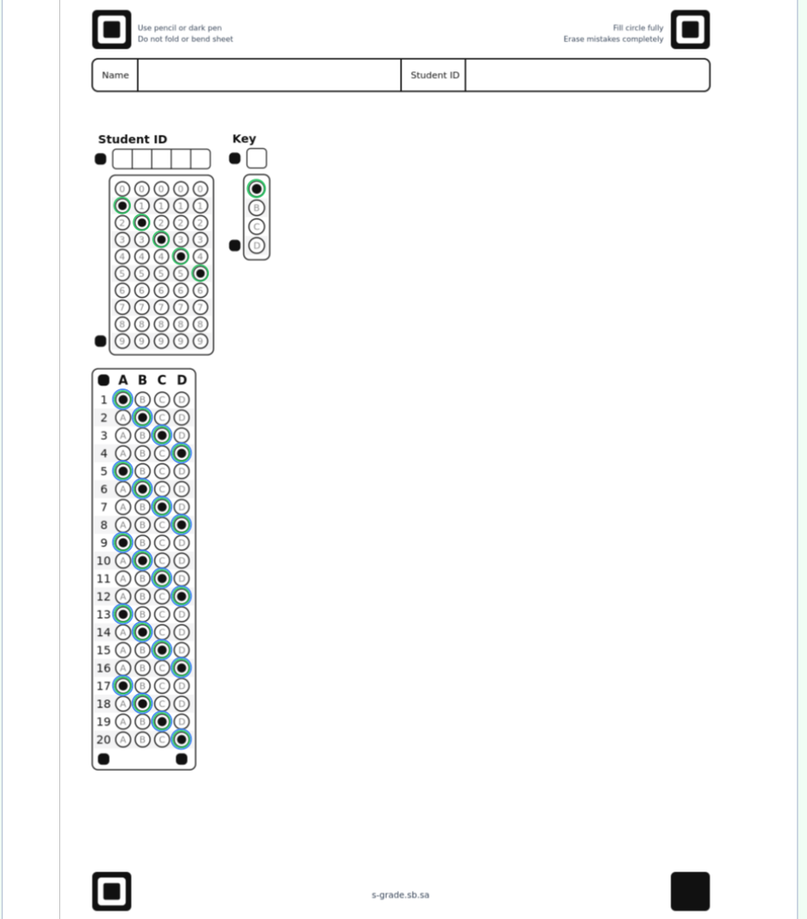
profile: `pristine` · 273 passed · 0 failed



INPUT



WARPED



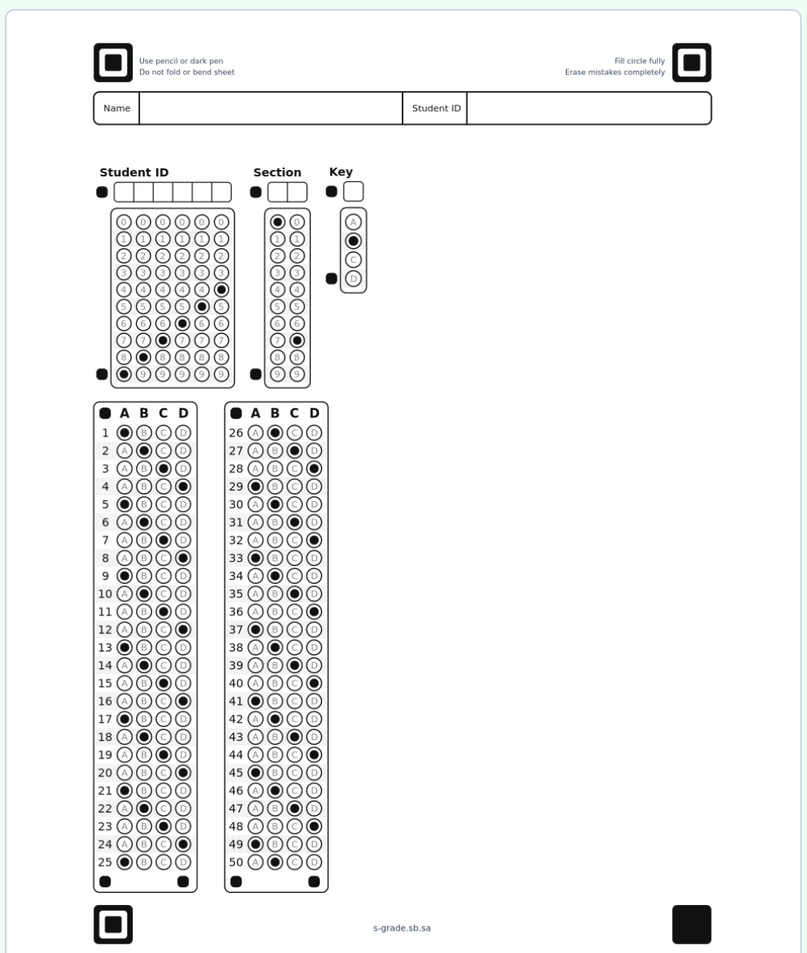
OVERLAY

field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`20`	`20`	✓

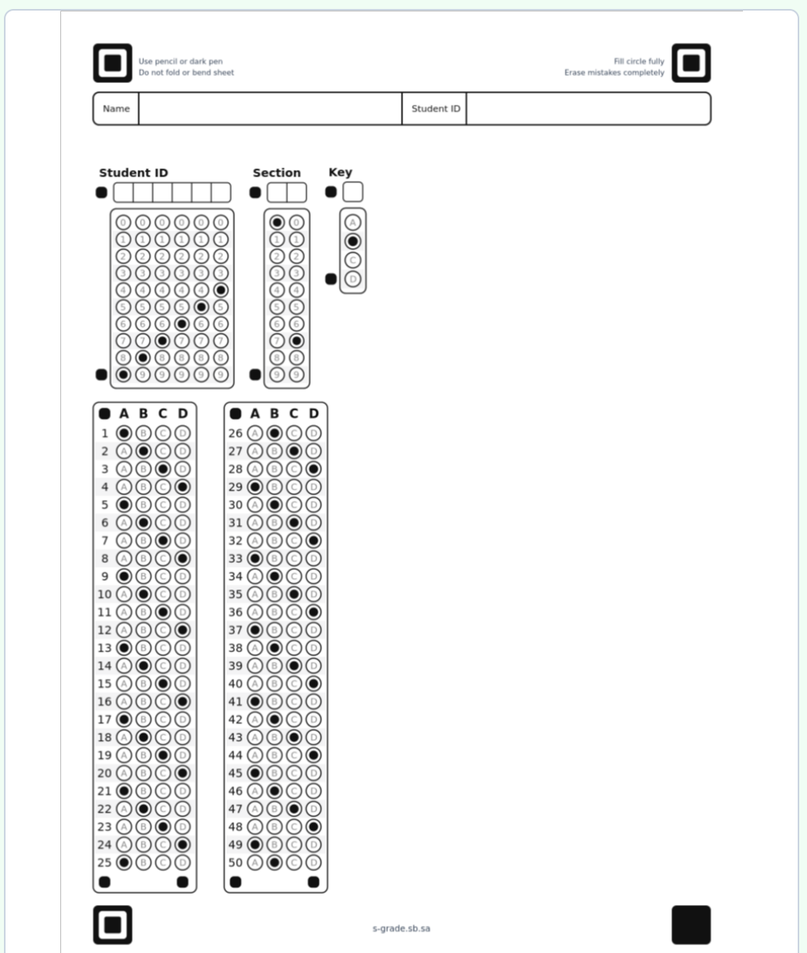
result.json

50q 6-id 2-col with-section · pristine PASS

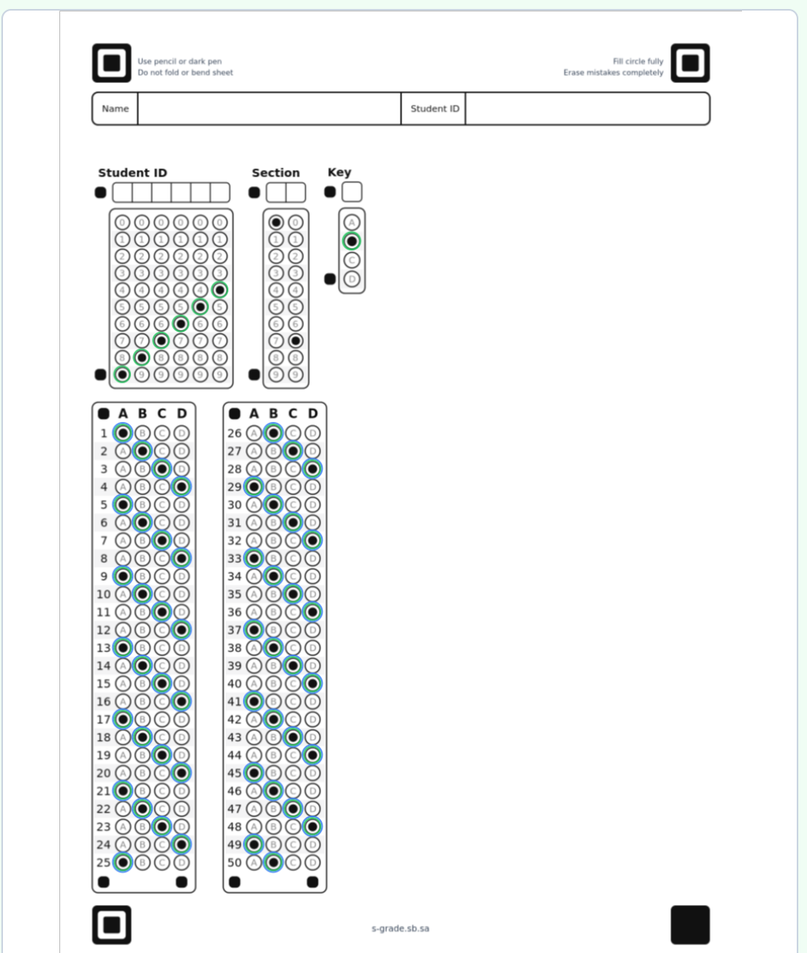
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



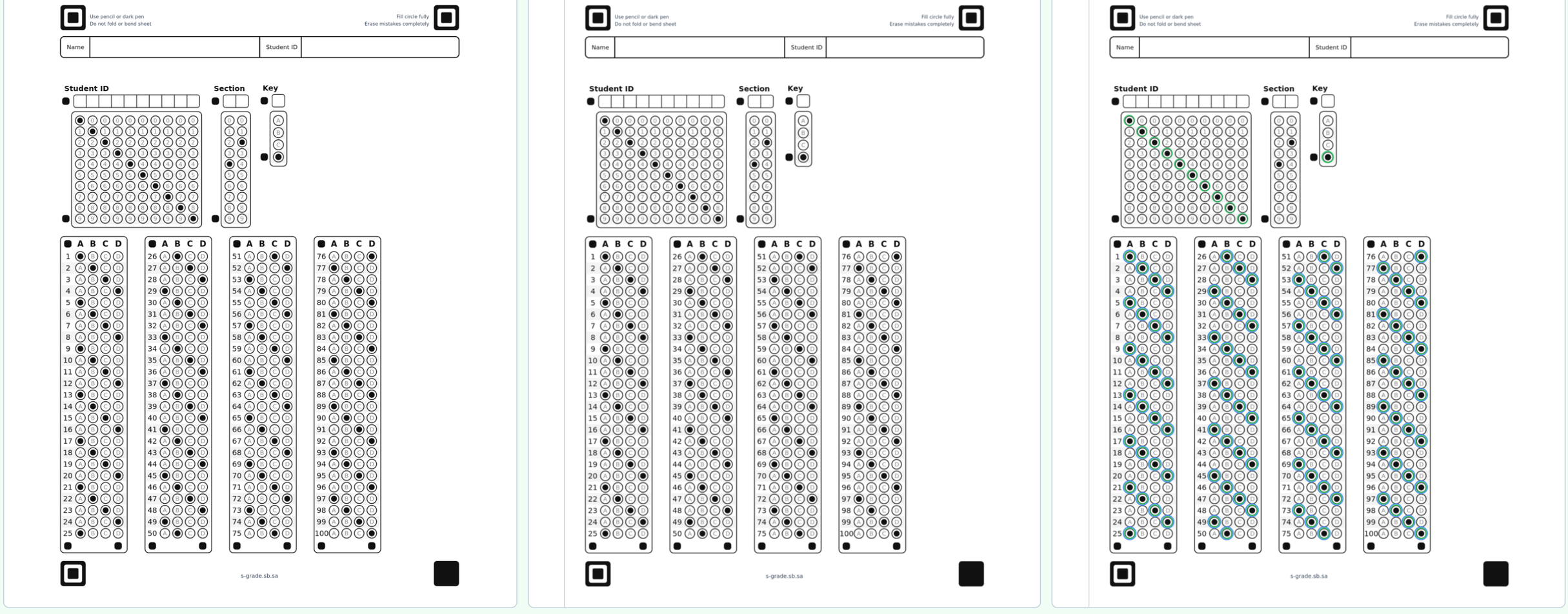
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

100q 10-id 4-col with-section · pristine PASS

profile: `pristine` · 1054 passed · 0 failed



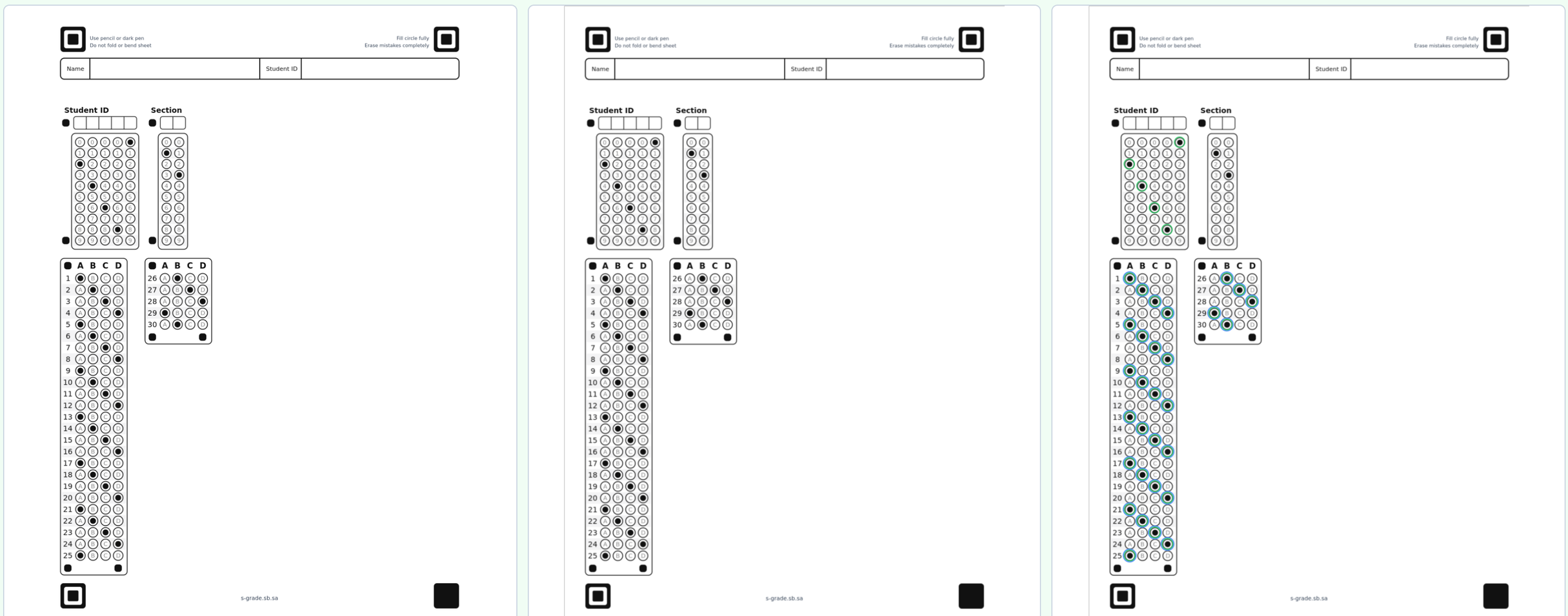
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`0123456789`	`0123456789`	✓
form	`D`	`D`	✓
section	`42`	`42`	✓
score	`100`	`100`	✓

result.json

30q · no Key zone (hasFormCode=false) PASS

profile: `pristine` · 386 passed · 0 failed



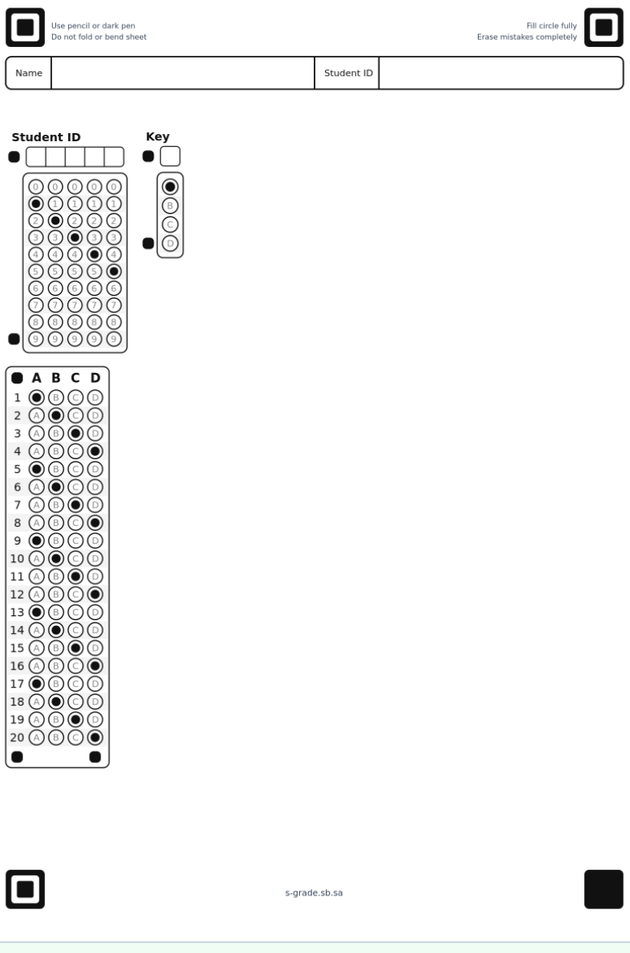
INPUT WARPED OVERLAY

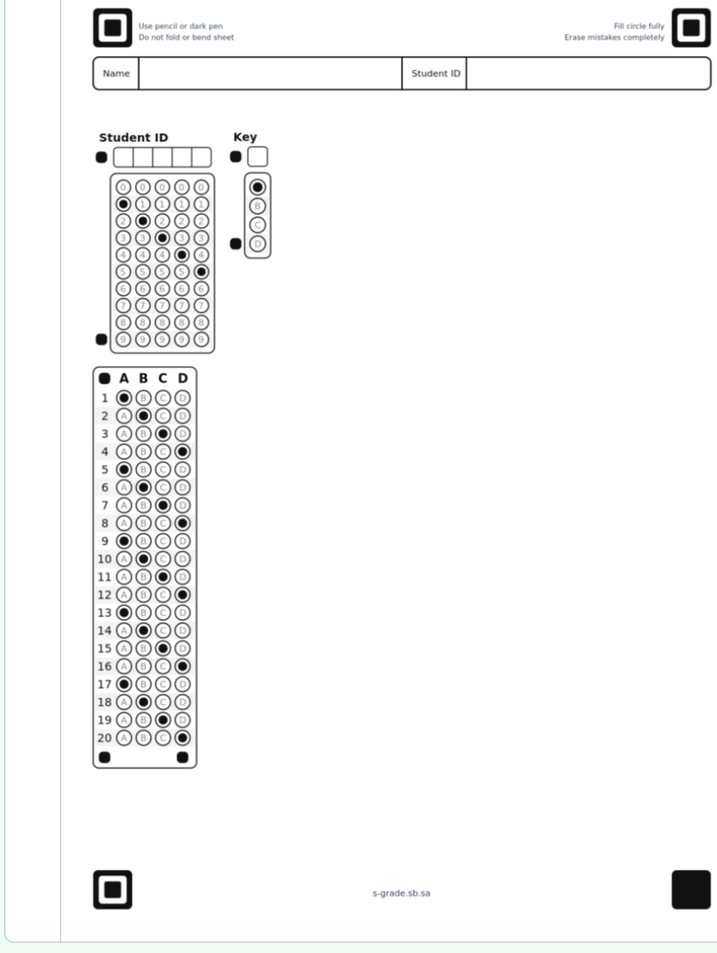
field	expected	actual	
studentId	`24680`	`24680`	✓
form	`A`	`A`	✓
section	`13`	`13`	✓
score	`30`	`30`	✓

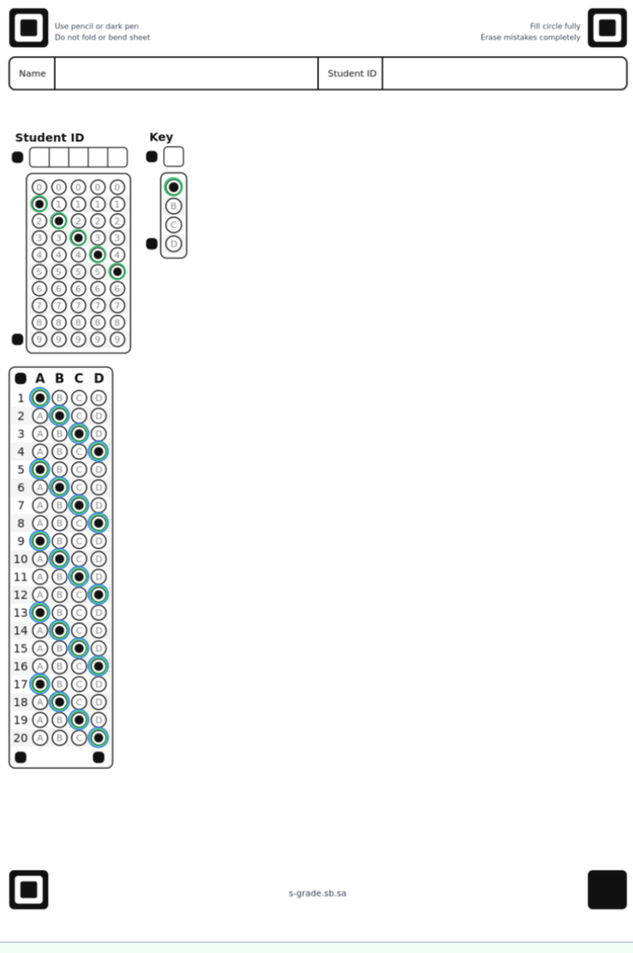
result.json

20q · no section zone (hasSectionSelector=false) PASS

profile: `pristine` · 273 passed · 0 failed







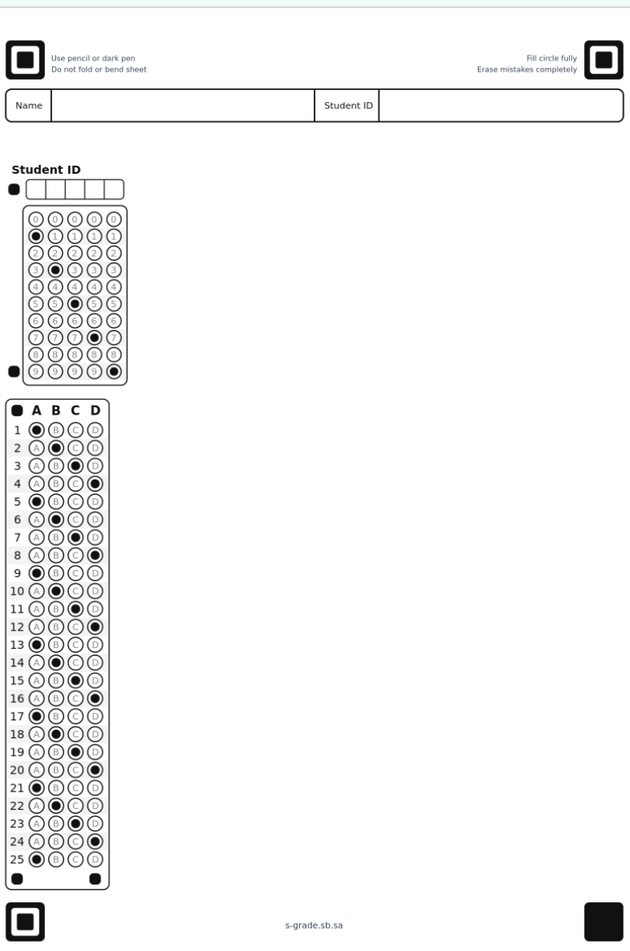
INPUT WARPED OVERLAY

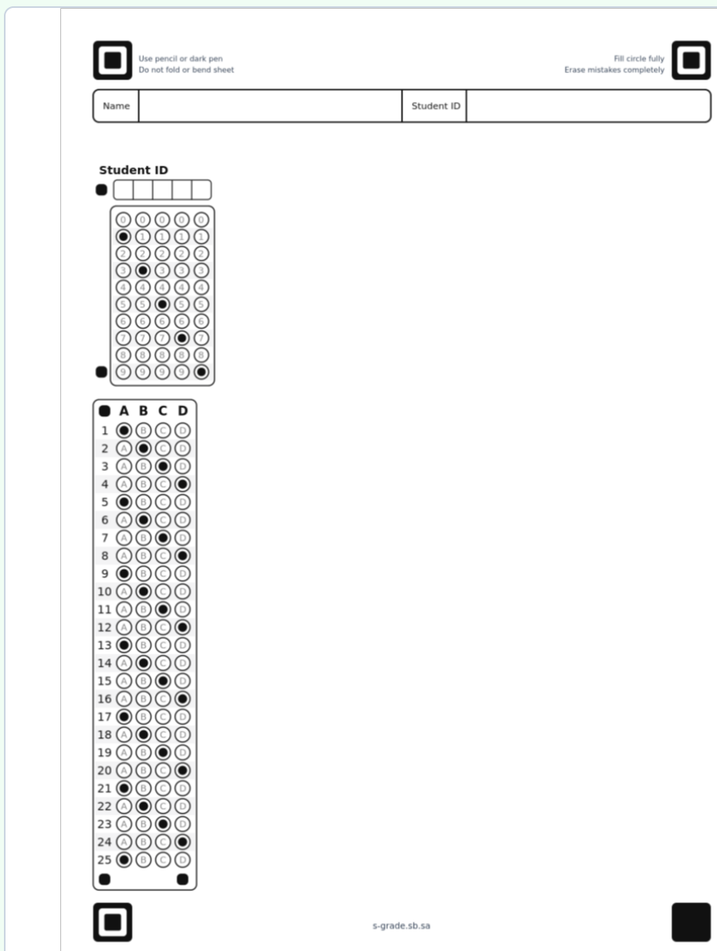
field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`20`	`20`	✓

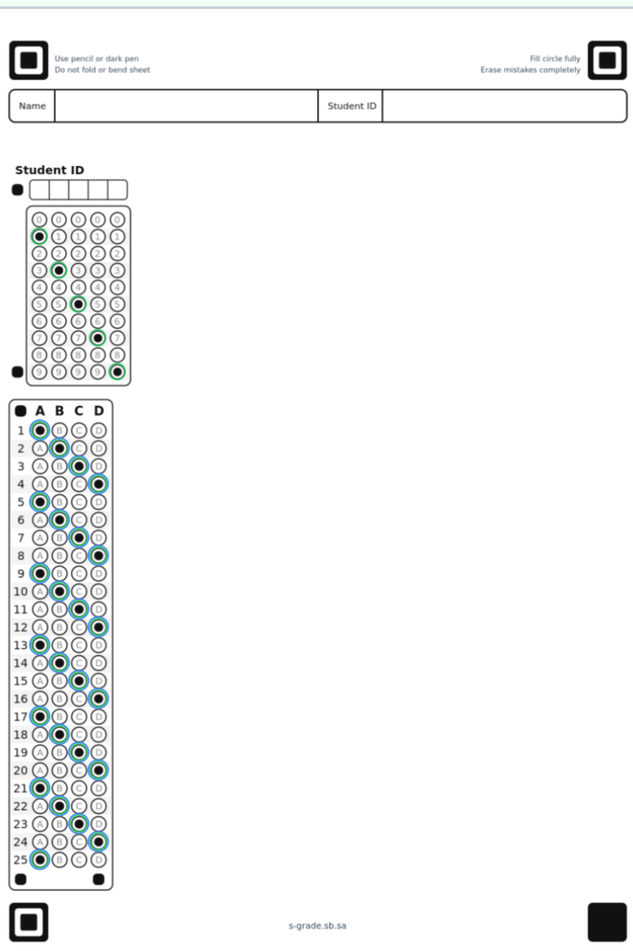
result.json

25q · no section AND no Key zones PASS

profile: `pristine` · 305 passed · 0 failed







INPUT WARPED OVERLAY

field	expected	actual	
studentId	`13579`	`13579`	✓
form	`A`	`A`	✓
score	`25`	`25`	✓

result.json

30q · no Key + mild perspective PASS

profile: `perspective_mild` · 386 passed · 0 failed

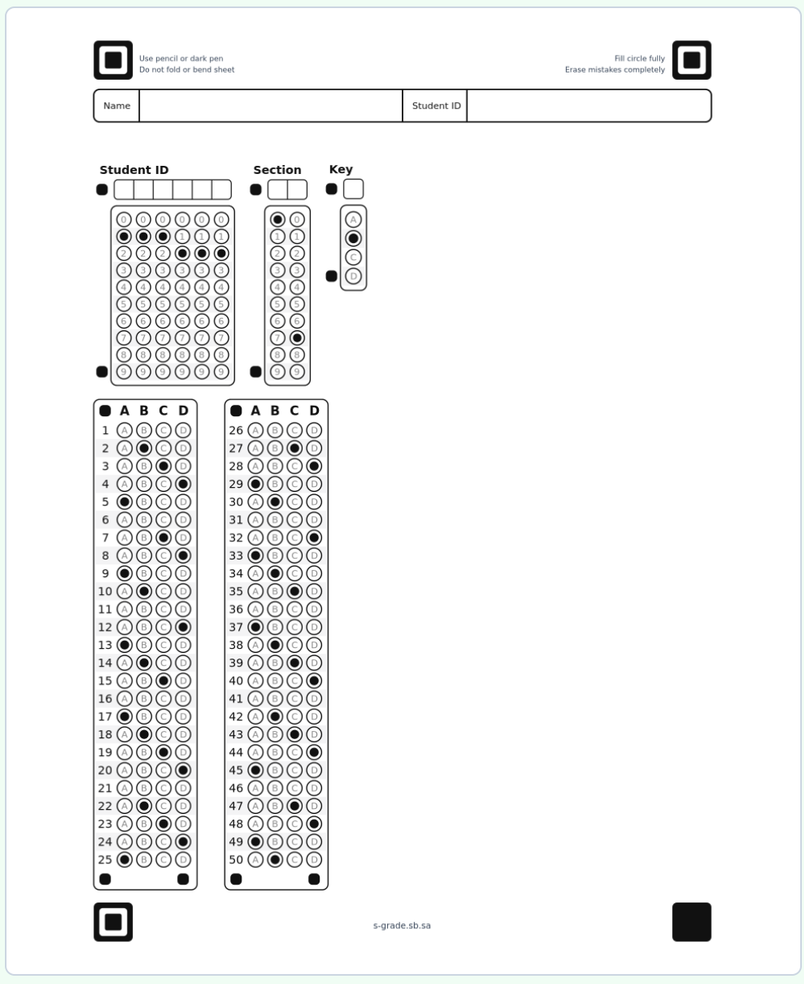
INPUT WARPED OVERLAY

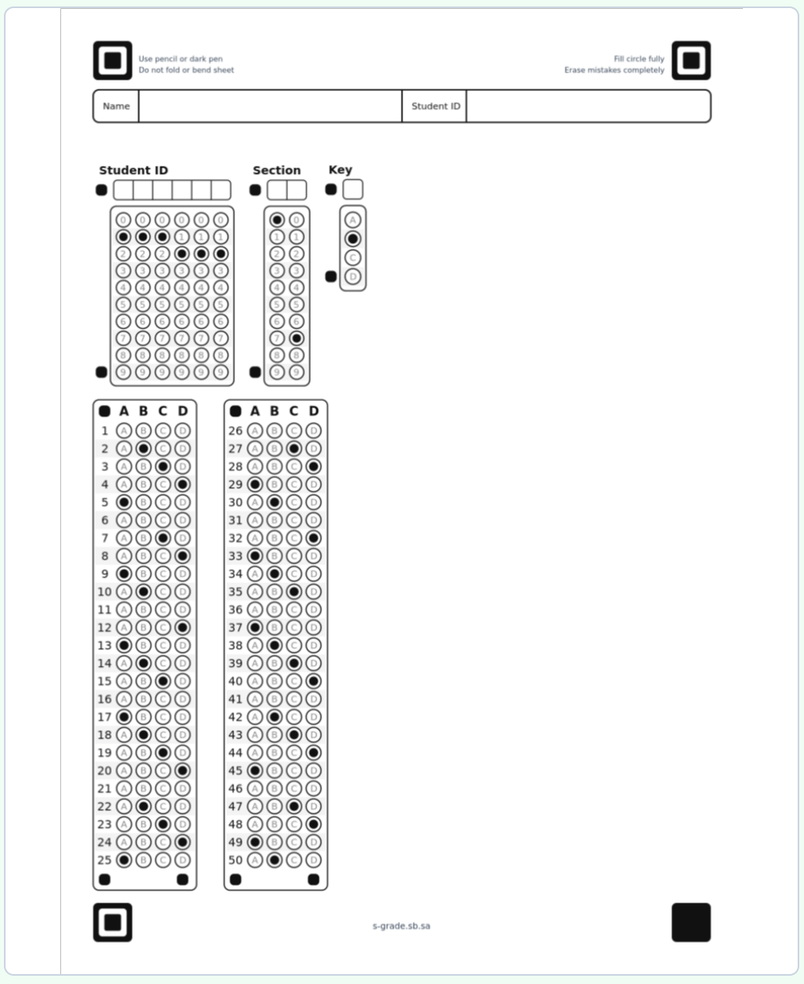
field	expected	actual	
studentId	`24680`	`24680`	✓
form	`A`	`A`	✓
section	`13`	`13`	✓
score	`30`	`30`	✓

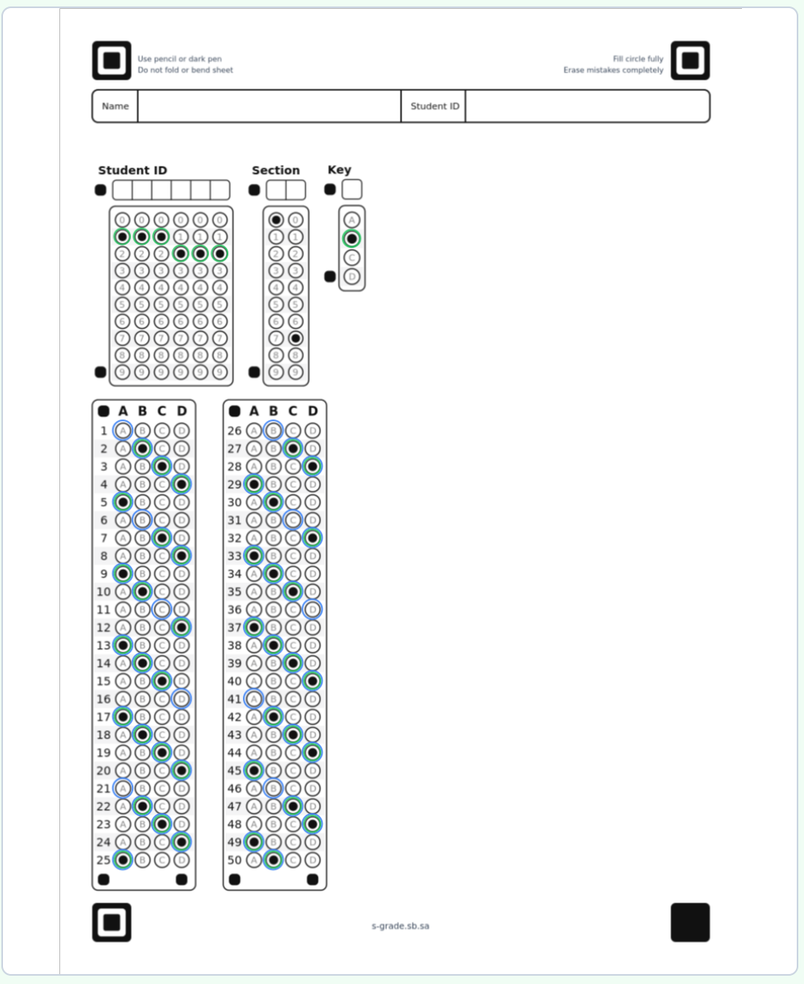
result.json

50q · 10 blank questions PASS

profile: `pristine` · 574 passed · 0 failed







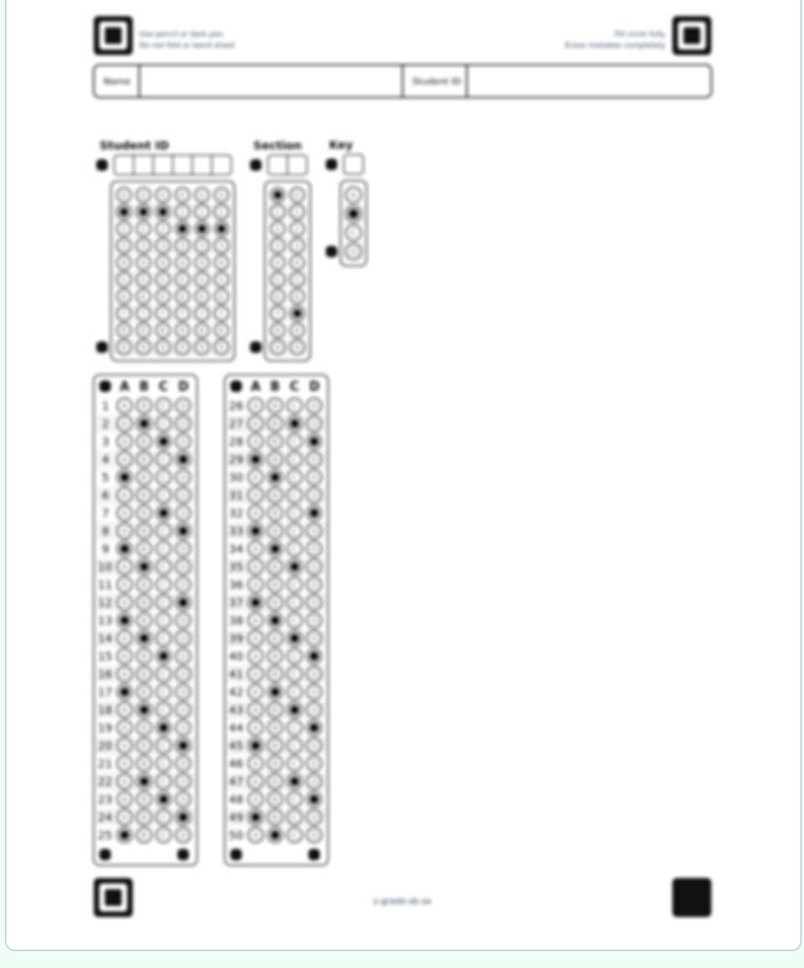
INPUT WARPED OVERLAY

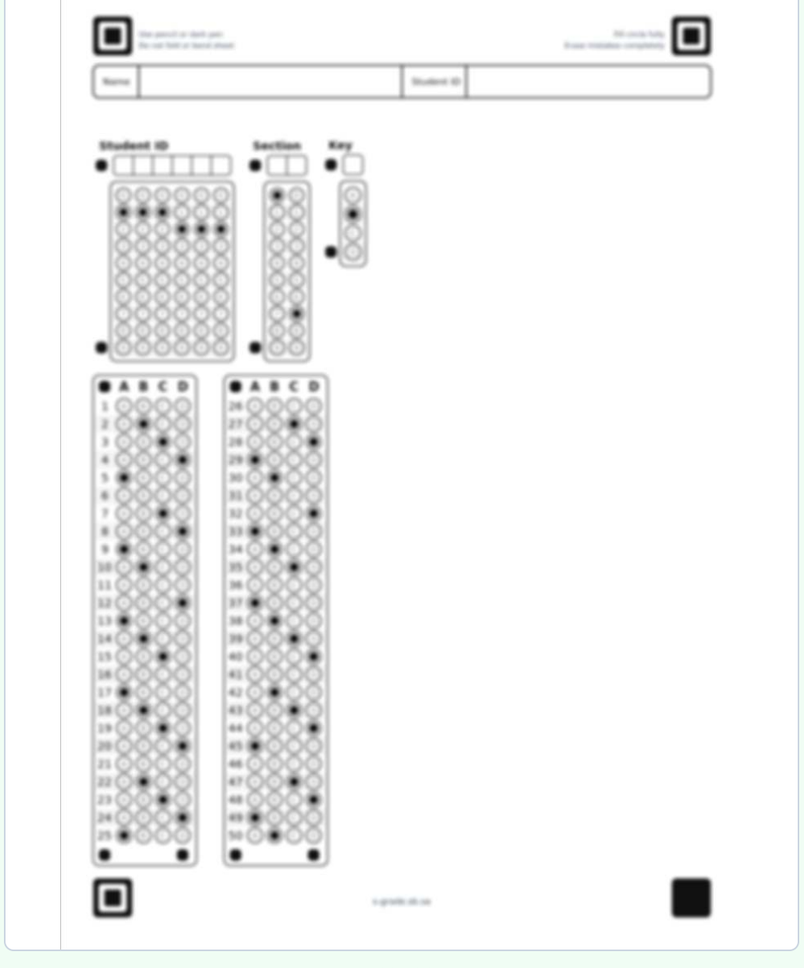
field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

result.json

50q · 10 blank questions + out of focus PASS

profile: `out_of_focus` · 574 passed · 0 failed







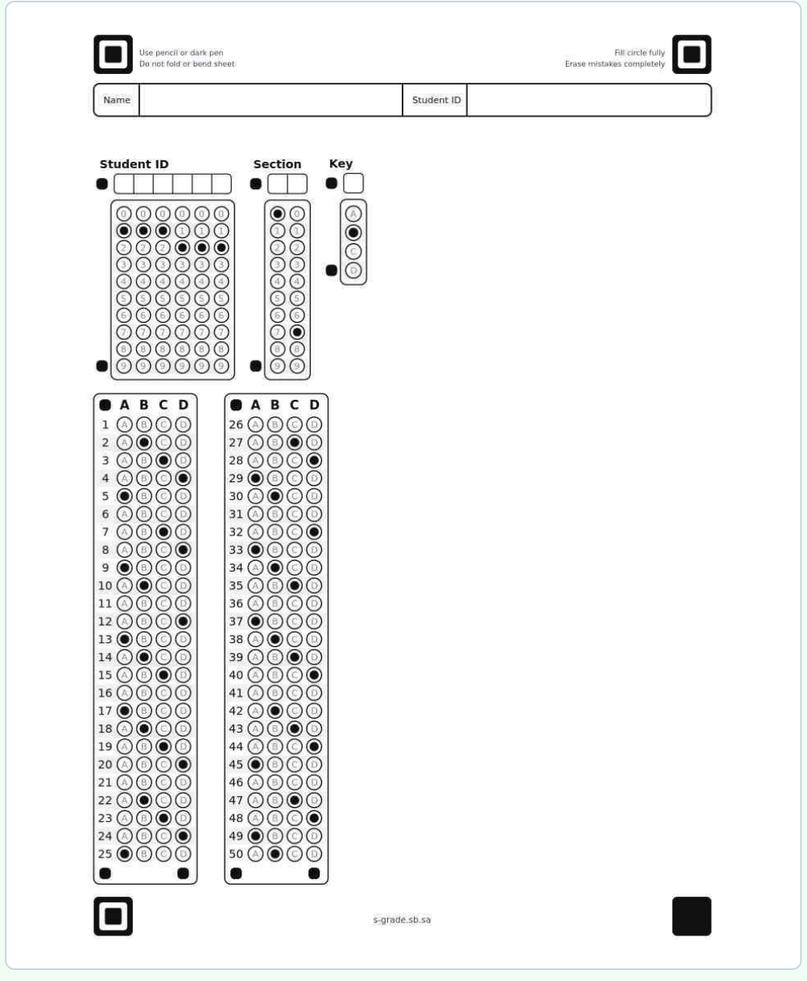
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

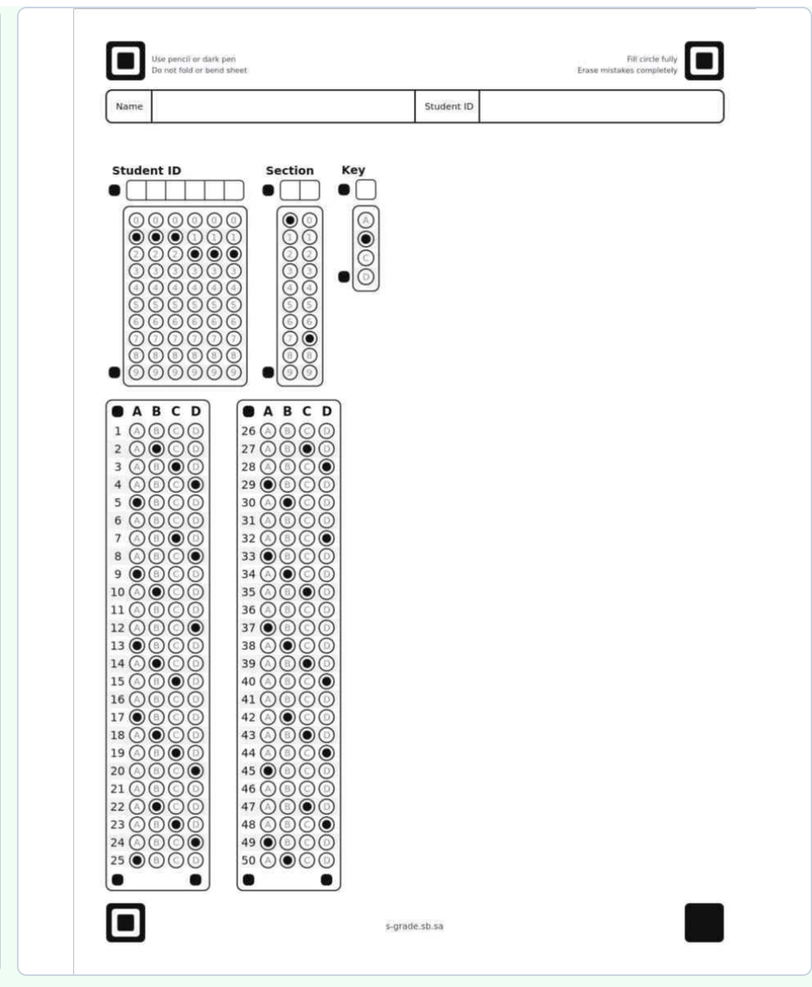
result.json

50q · 10 blank questions + jpeg q30 PASS

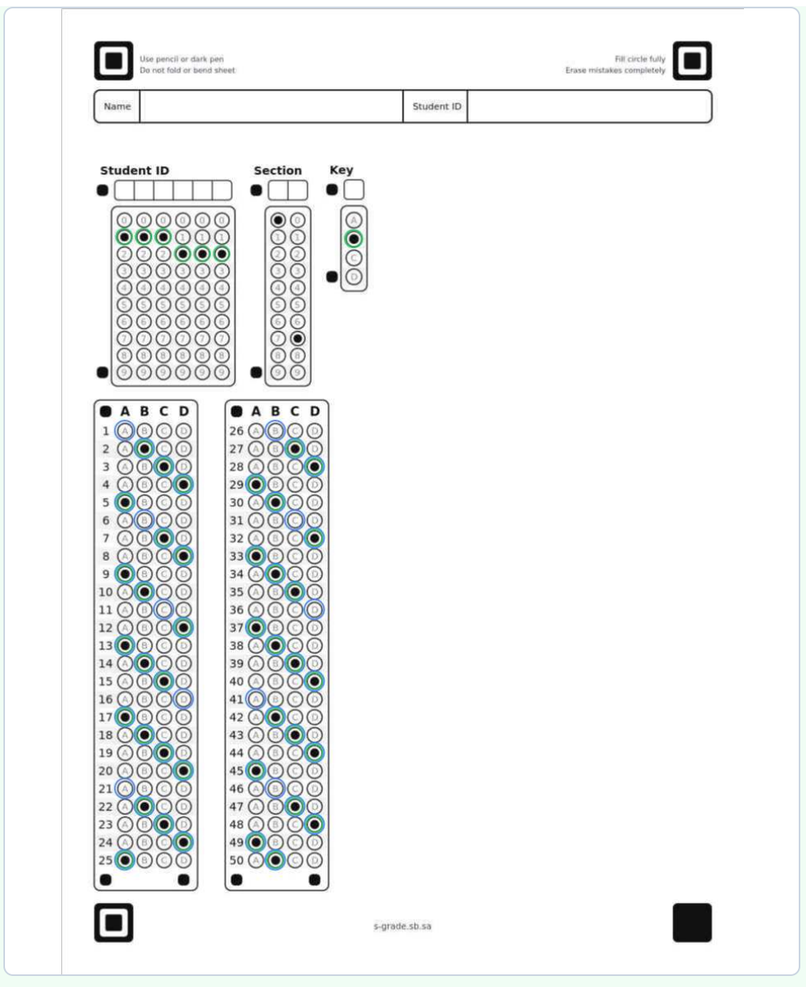
profile: `jpeg_q30` · 574 passed · 0 failed



INPUT



WARPED



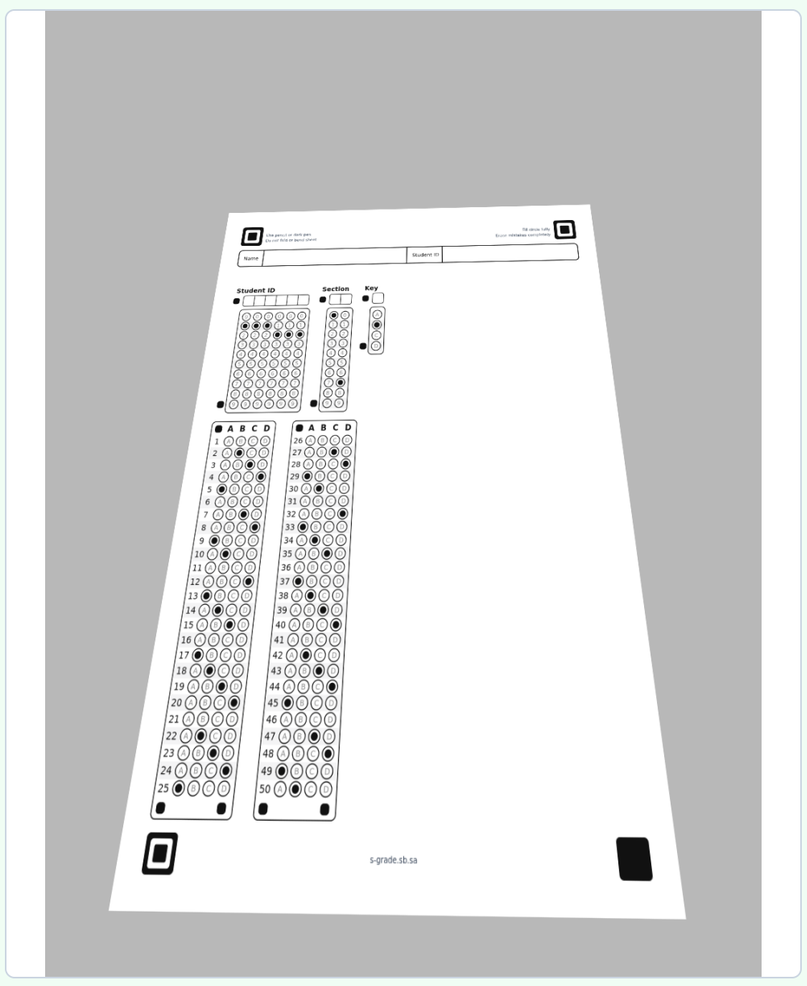
OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

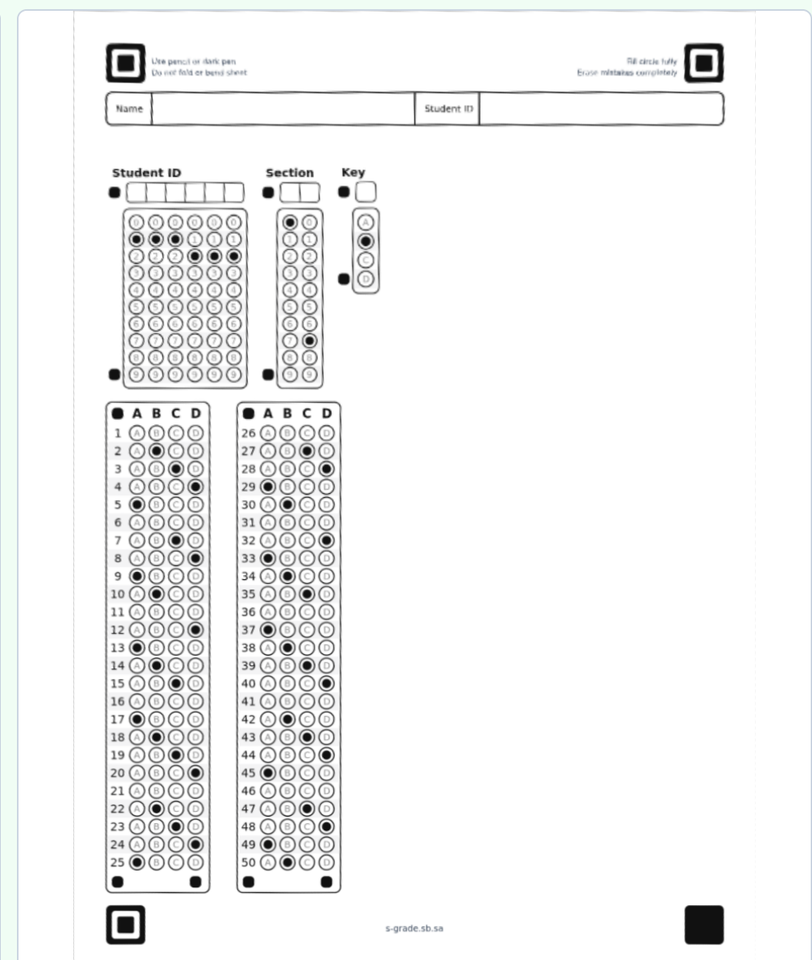
result.json

50q · 10 blank questions + steep keystone PASS

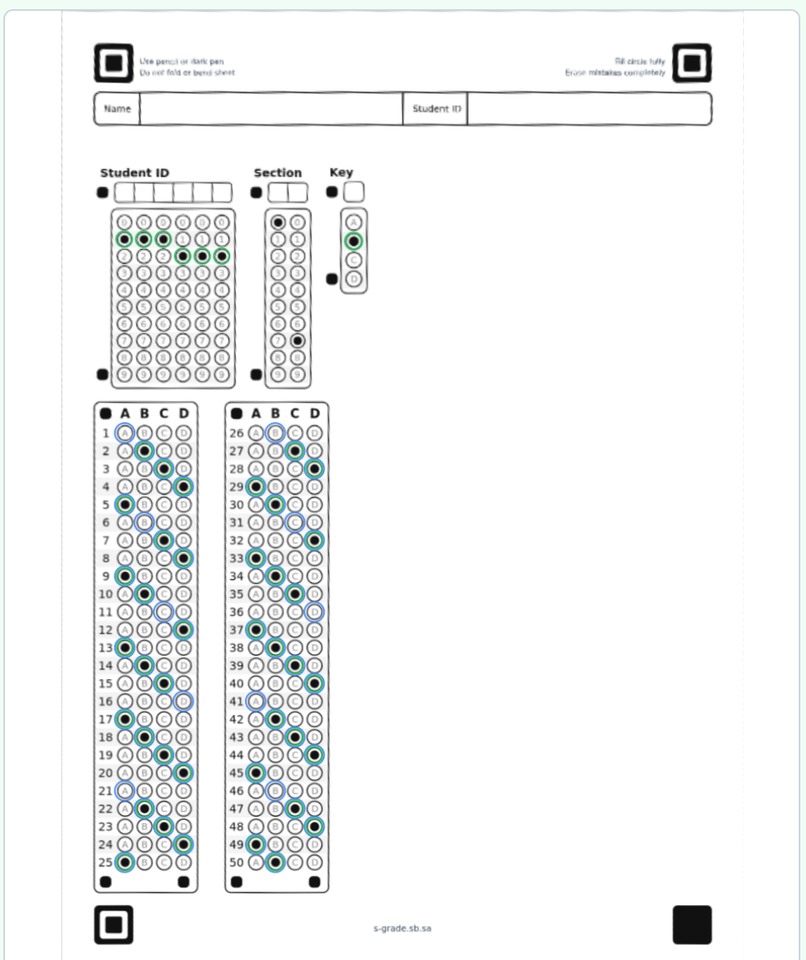
profile: `perspective_steep` · 574 passed · 0 failed



INPUT



WARPED



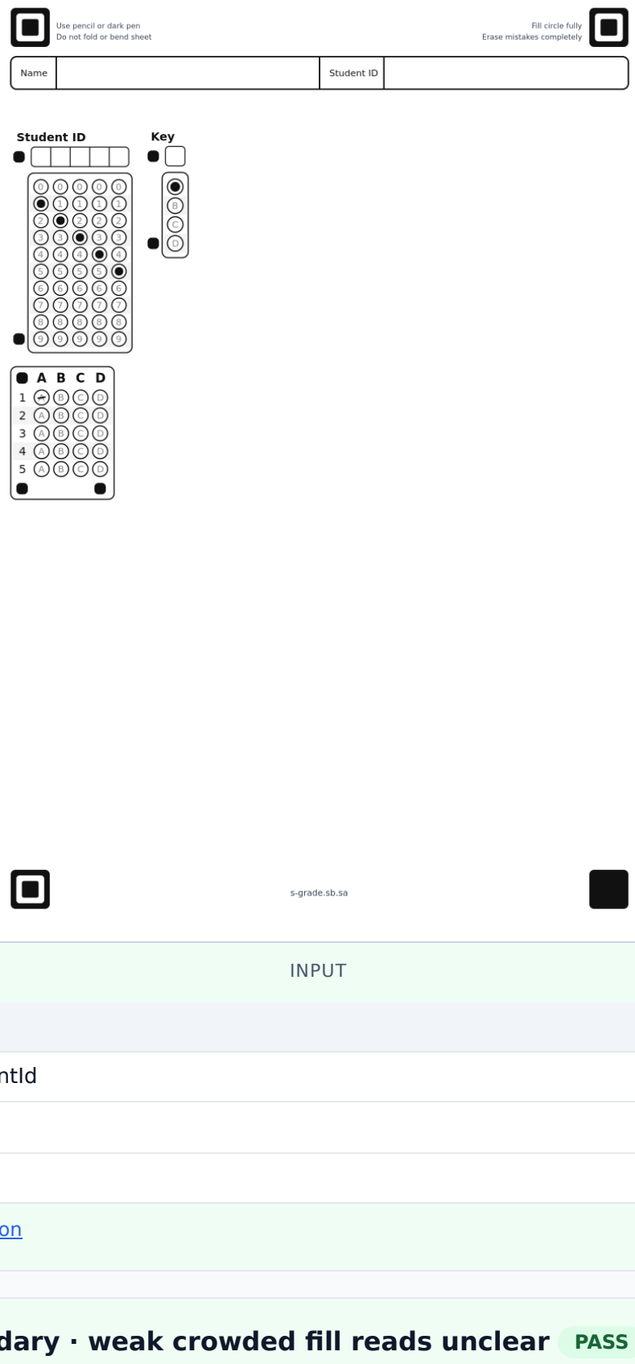
OVERLAY

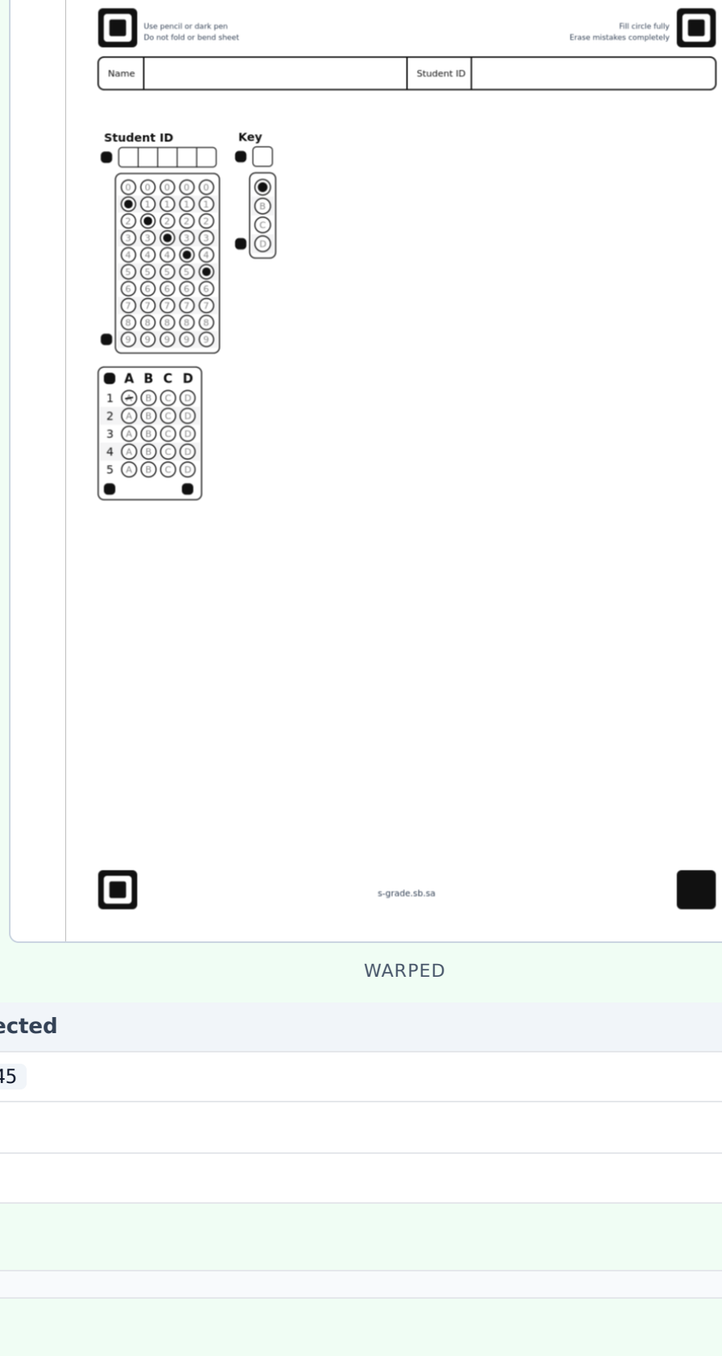
field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

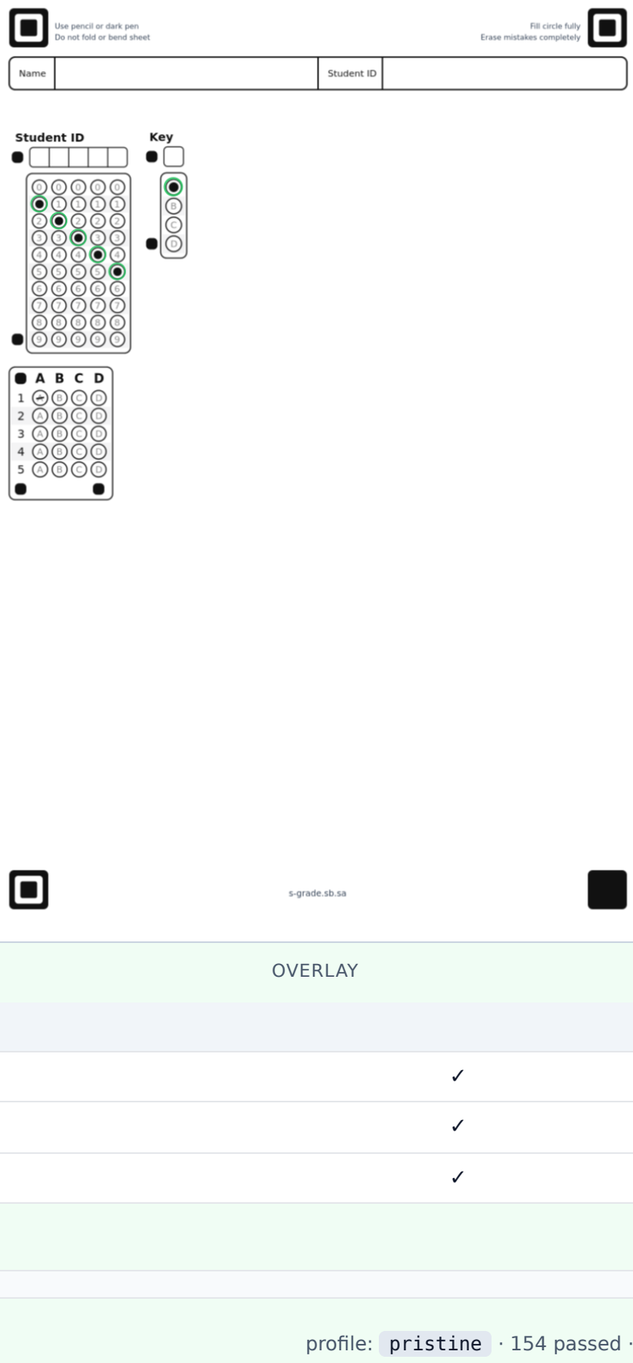
result.json

boundary · too-small stroke below 0.47 reads blank PASS

profile: `pristine` · 154 passed · 0 failed







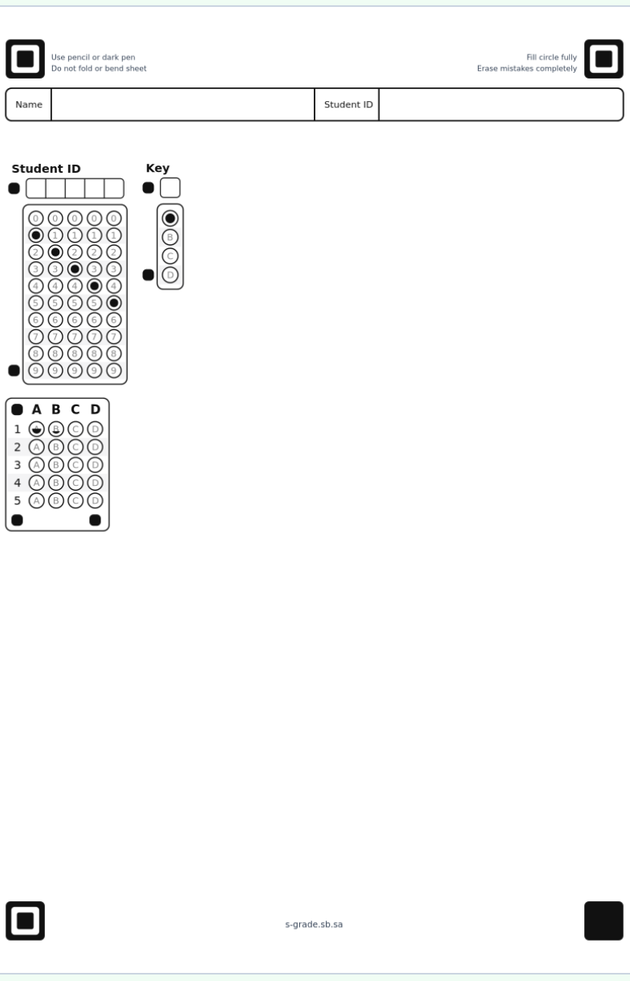
INPUT WARPED OVERLAY

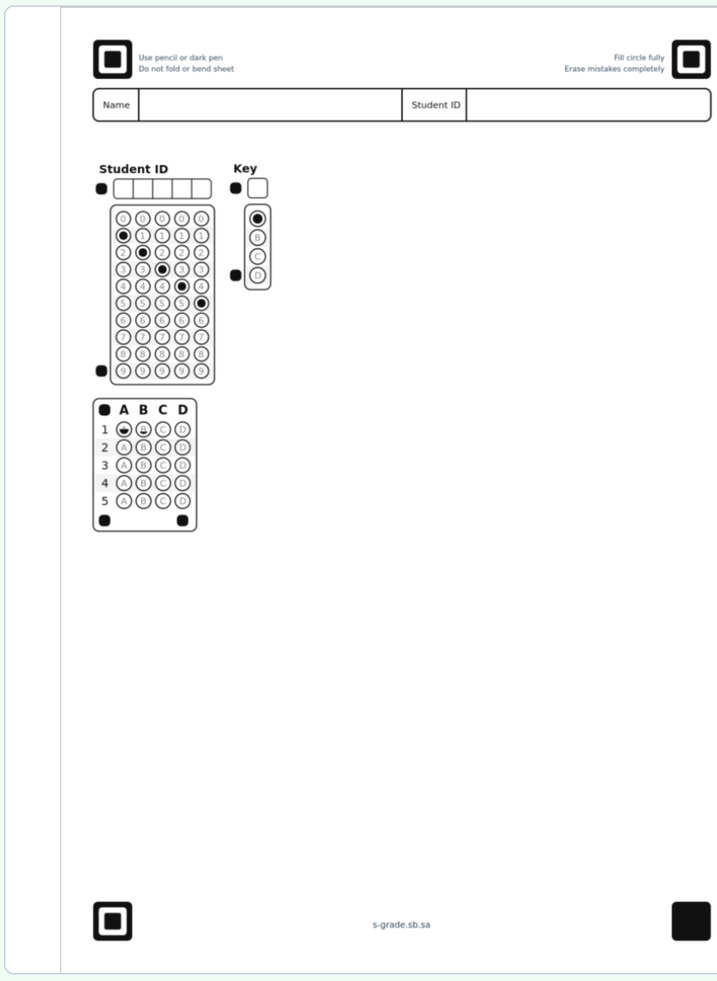
field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`0`	`0`	✓

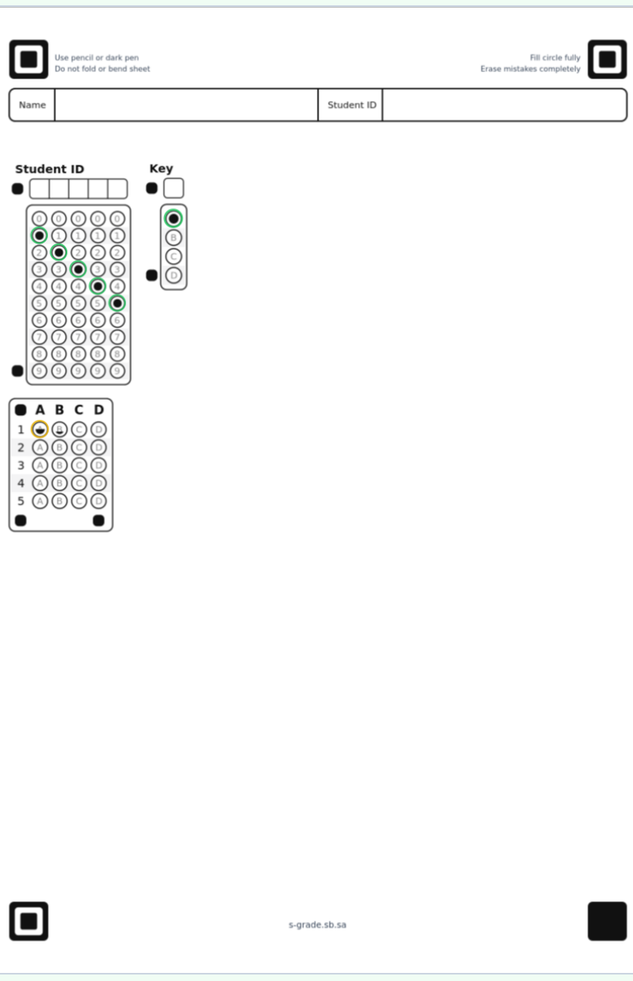
result.json

boundary · weak crowded fill reads unclear PASS

profile: `pristine` · 154 passed · 0 failed







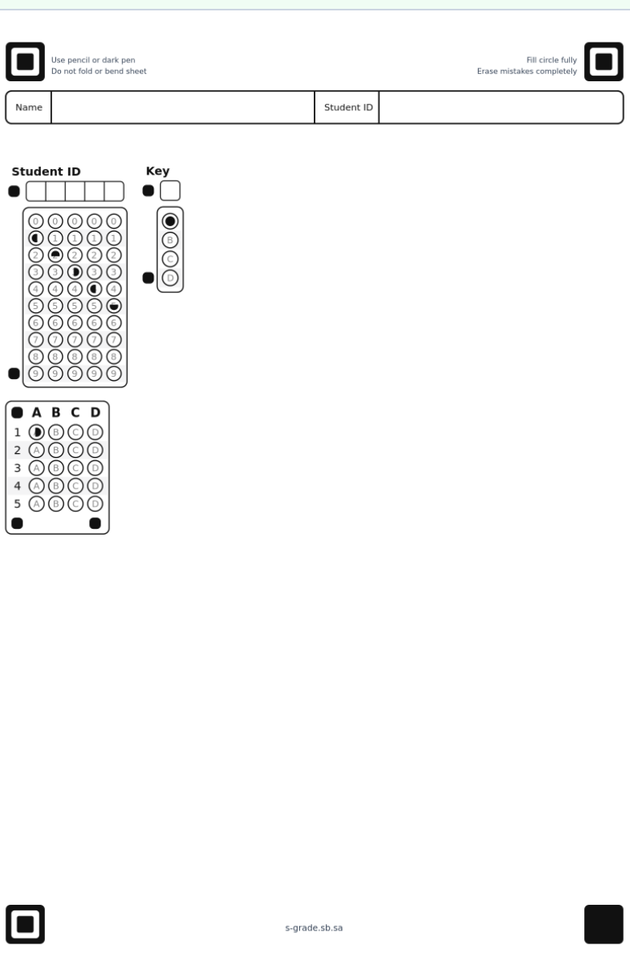
INPUT WARPED OVERLAY

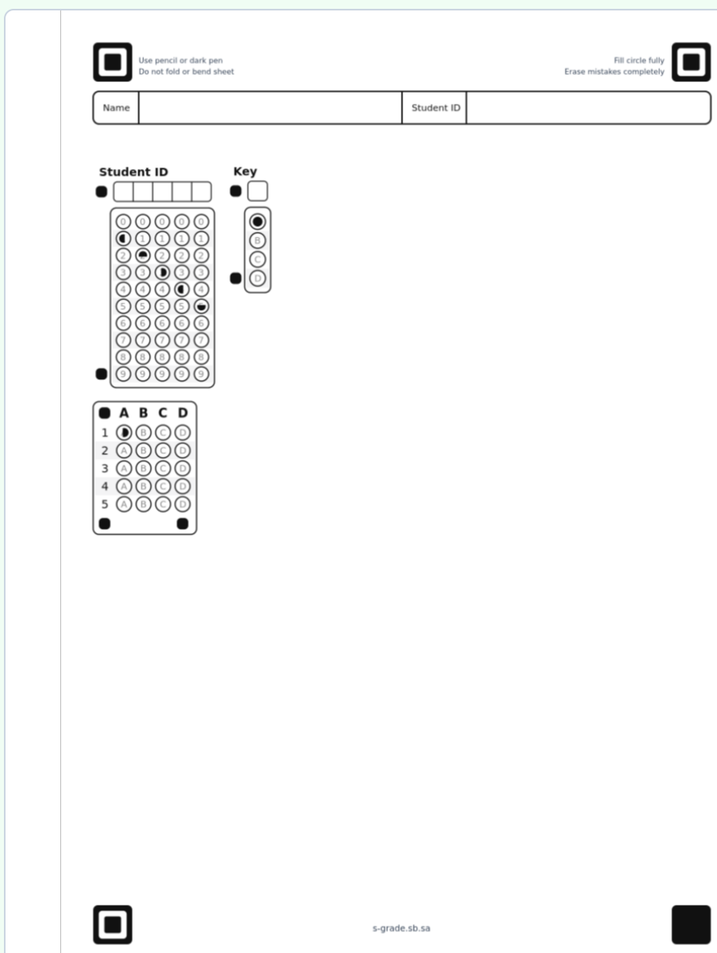
field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`0`	`0`	✓

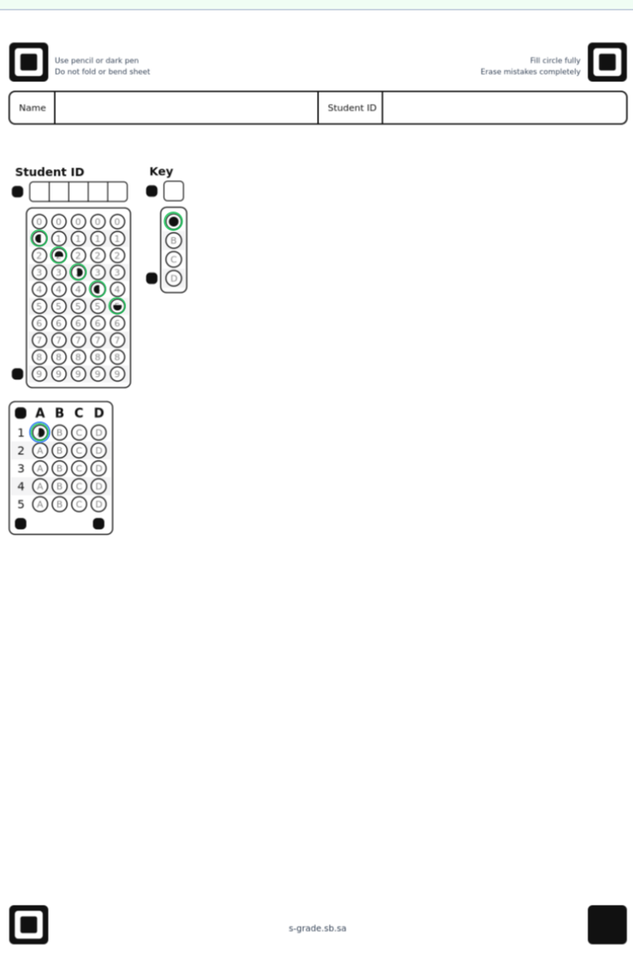
result.json

boundary · strong enough fill reads selected PASS

profile: `pristine` · 154 passed · 0 failed







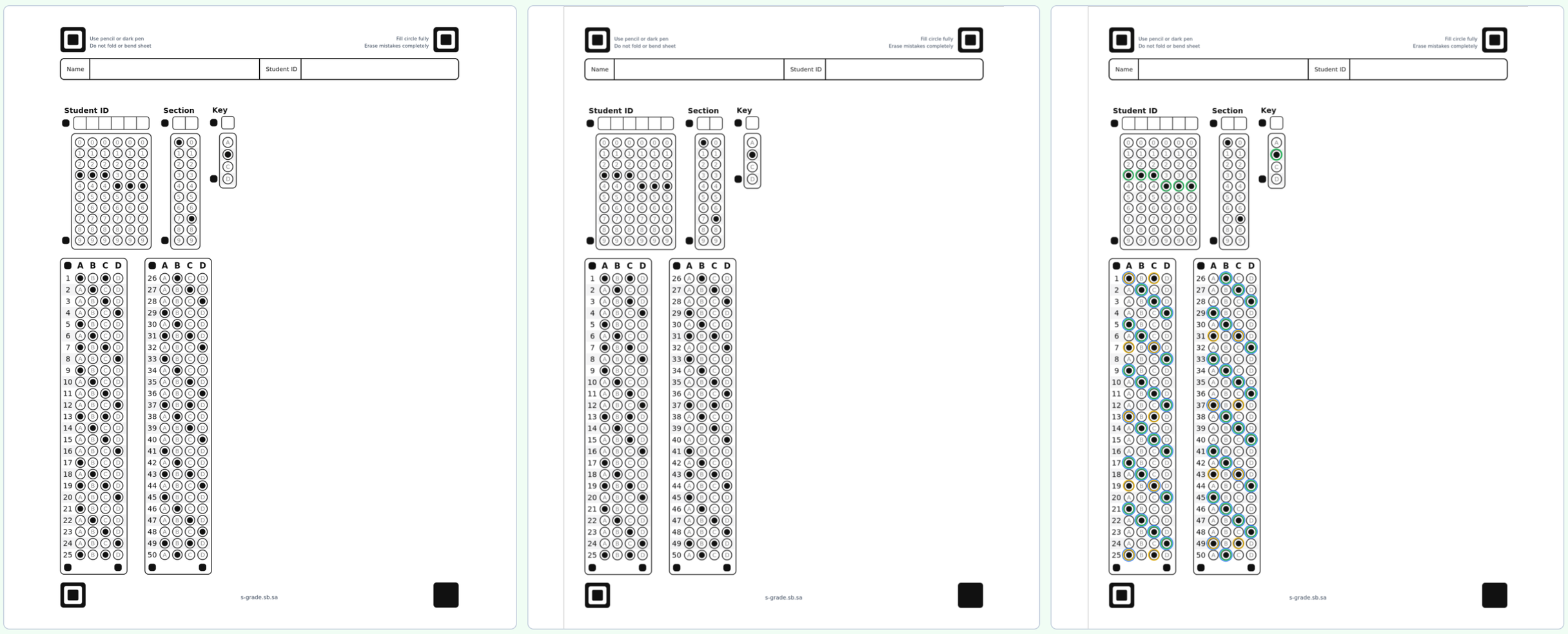
INPUT WARPED OVERLAY

field	expected	actual	
studentId	12345	12345	✓
form	A	A	✓
score	1	1	✓

result.json

50q · multi-marked questions PASS

profile: `pristine` · 574 passed · 0 failed



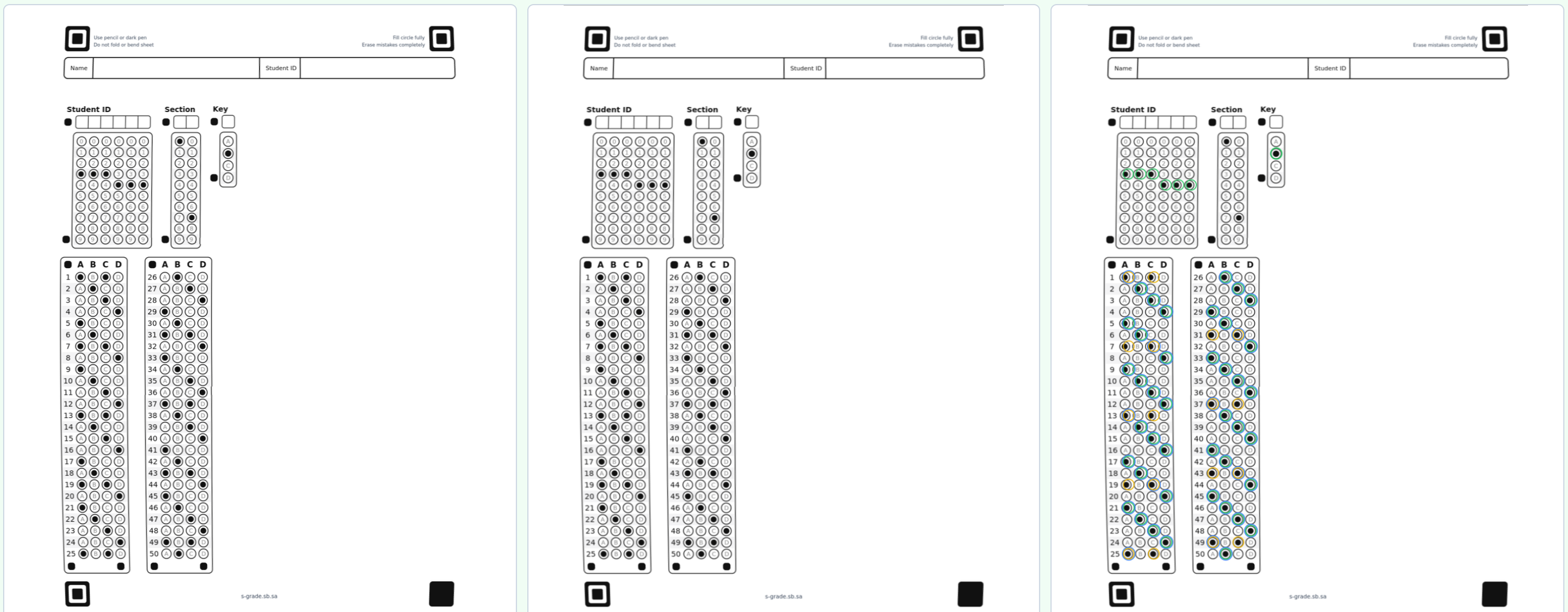
INPUT WARPED OVERLAY

field	expected	actual	
studentId	333444	333444	✓
form	B	B	✓
section	07	07	✓
score	41	41	✓

result.json

50q · multi-marked + curled page MILD PASS

profile: `curled_page_mild` · 574 passed · 0 failed



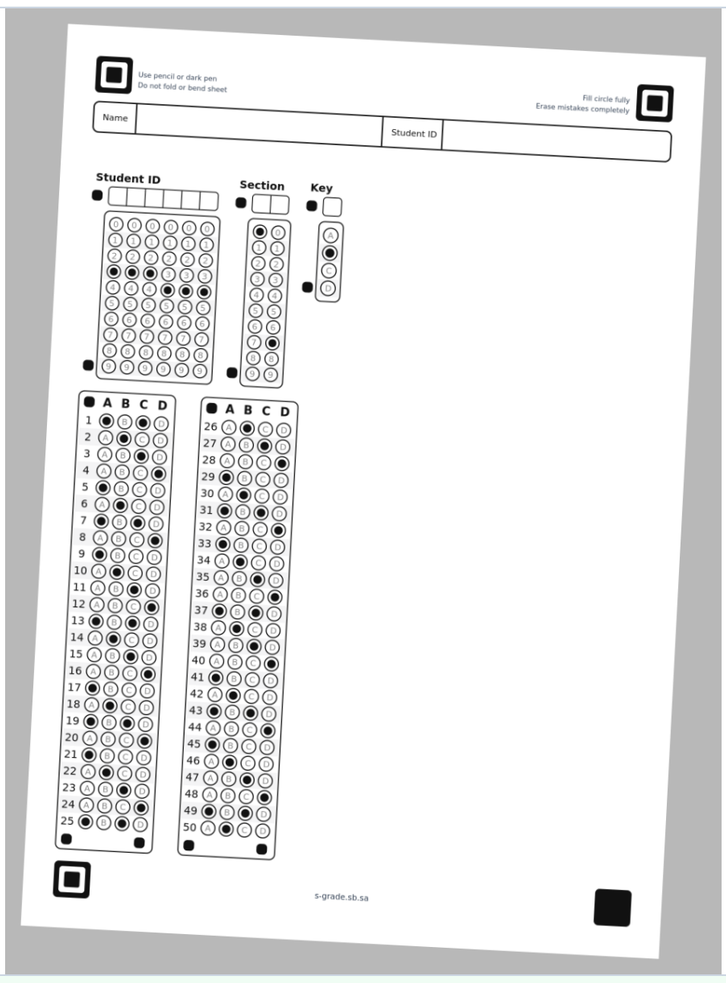
INPUT WARPED OVERLAY

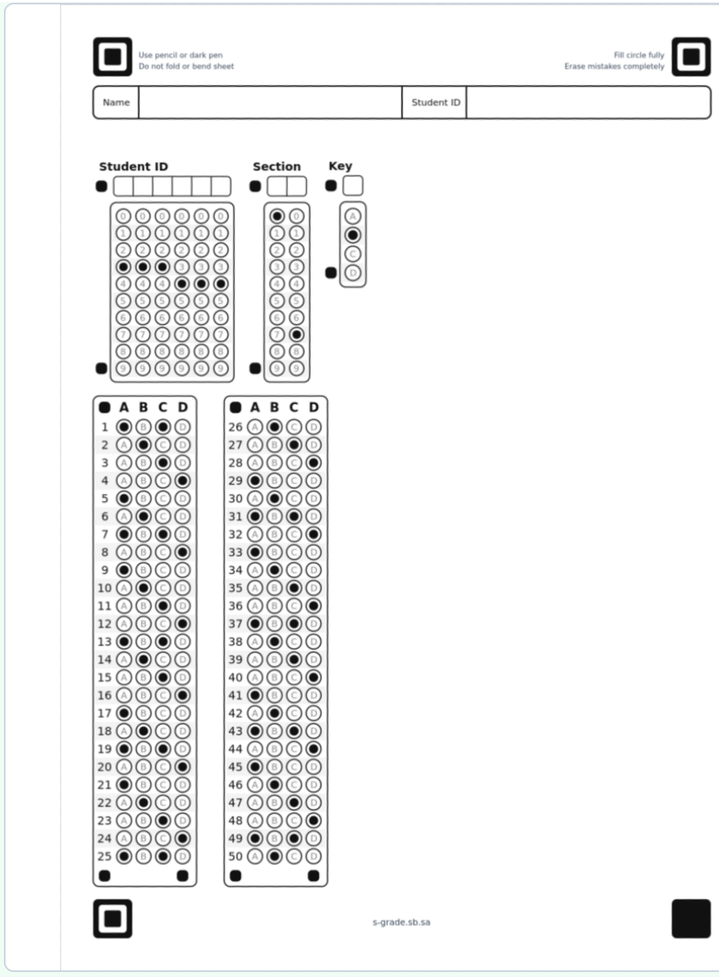
field	expected	actual	
studentId	333444	333444	✓
form	B	B	✓
section	07	07	✓
score	41	41	✓

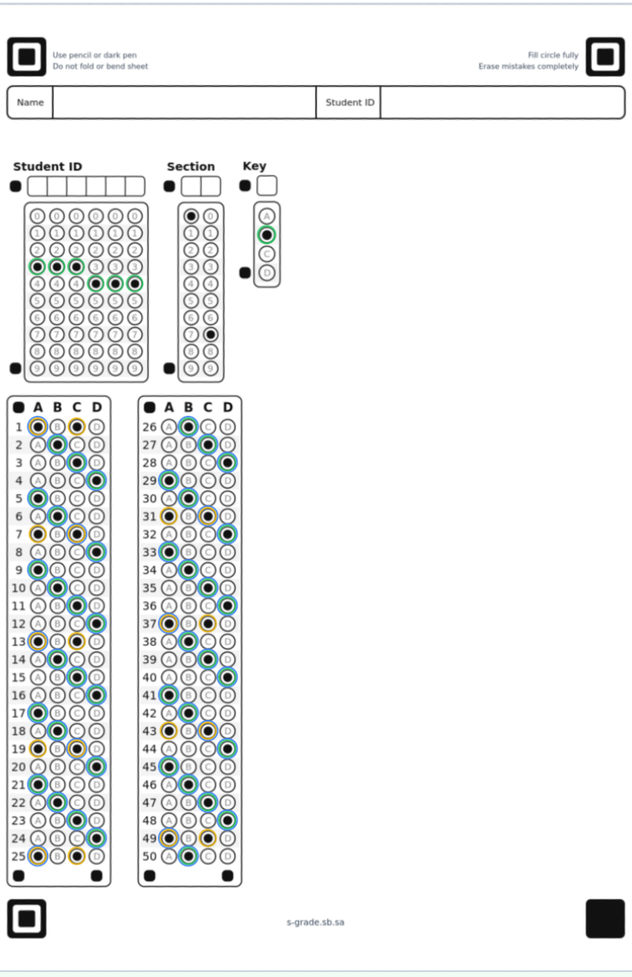
result.json

50q · multi-marked + rotated 3° PASS

profile: `rotated_3deg` · 574 passed · 0 failed







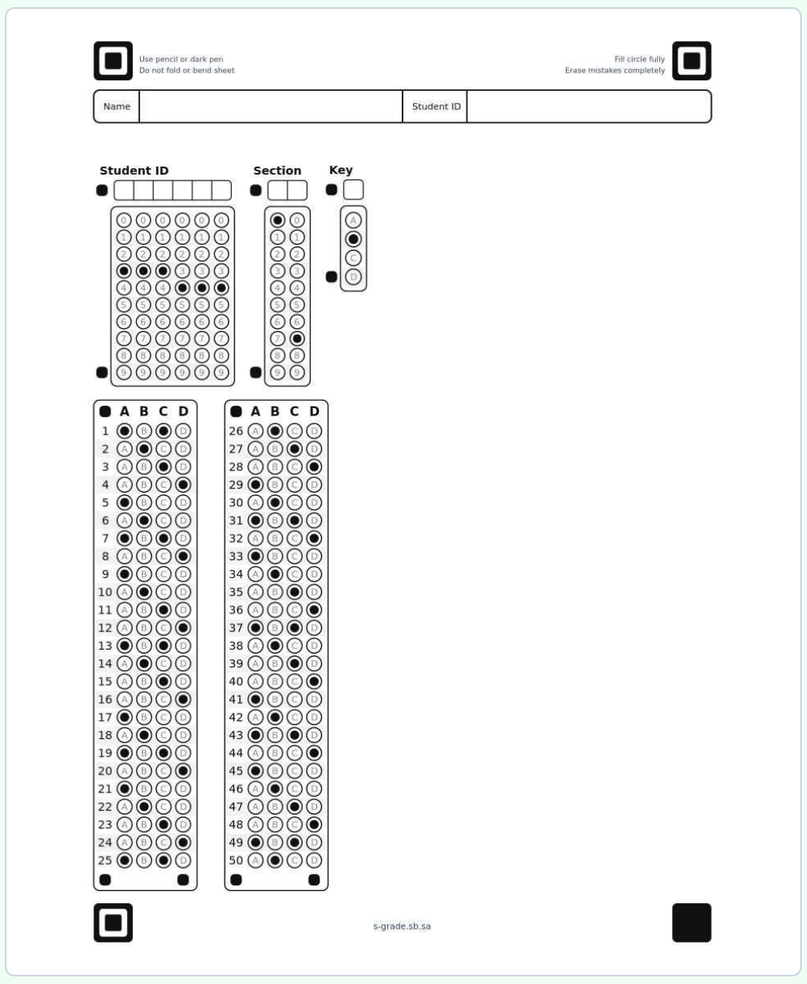
INPUT WARPED OVERLAY

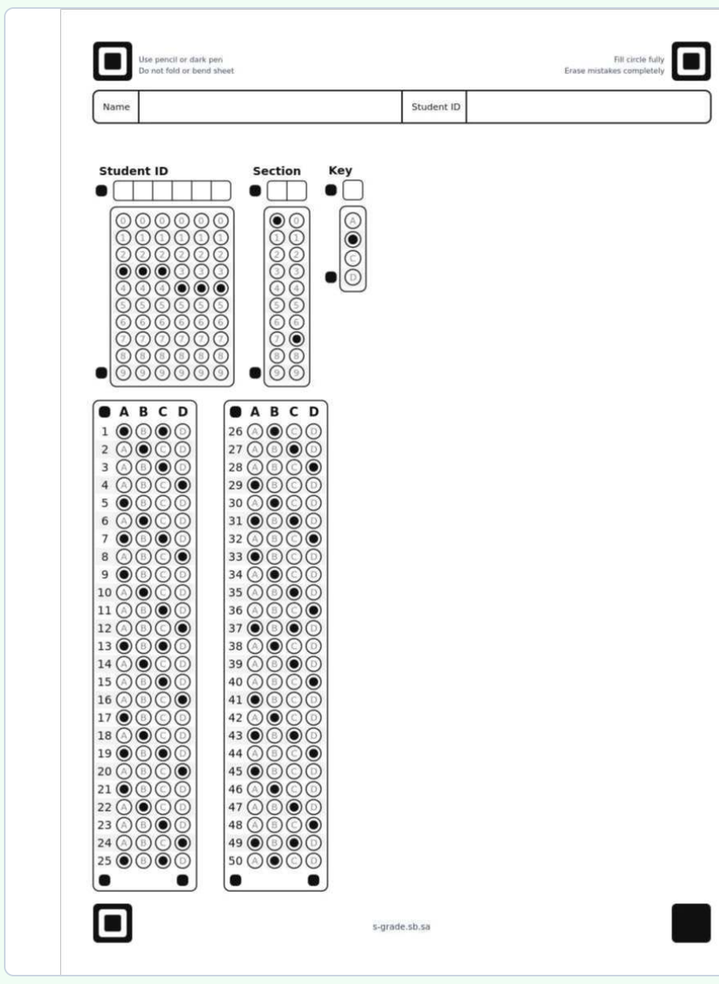
field	expected	actual	
studentId	`333444`	`333444`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`41`	`41`	✓

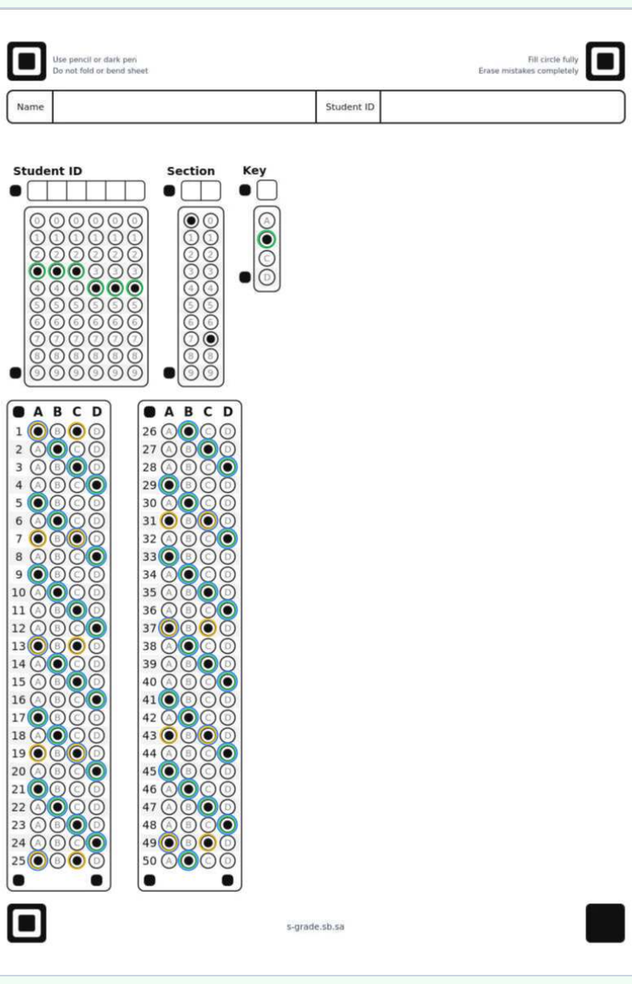
result.json

50q · multi-marked + jpeg q50 PASS

profile: `jpeg_q50` · 574 passed · 0 failed







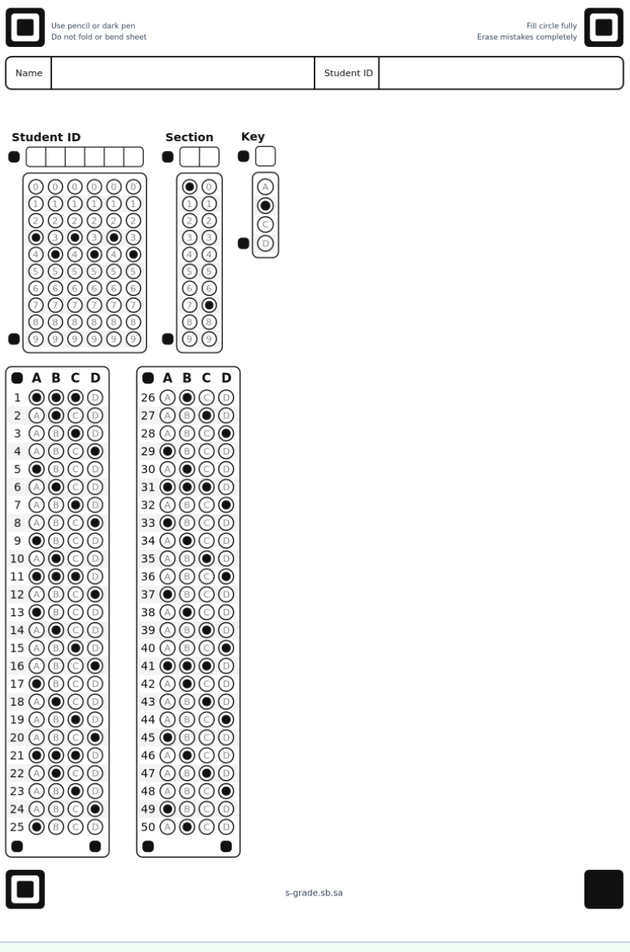
INPUT WARPED OVERLAY

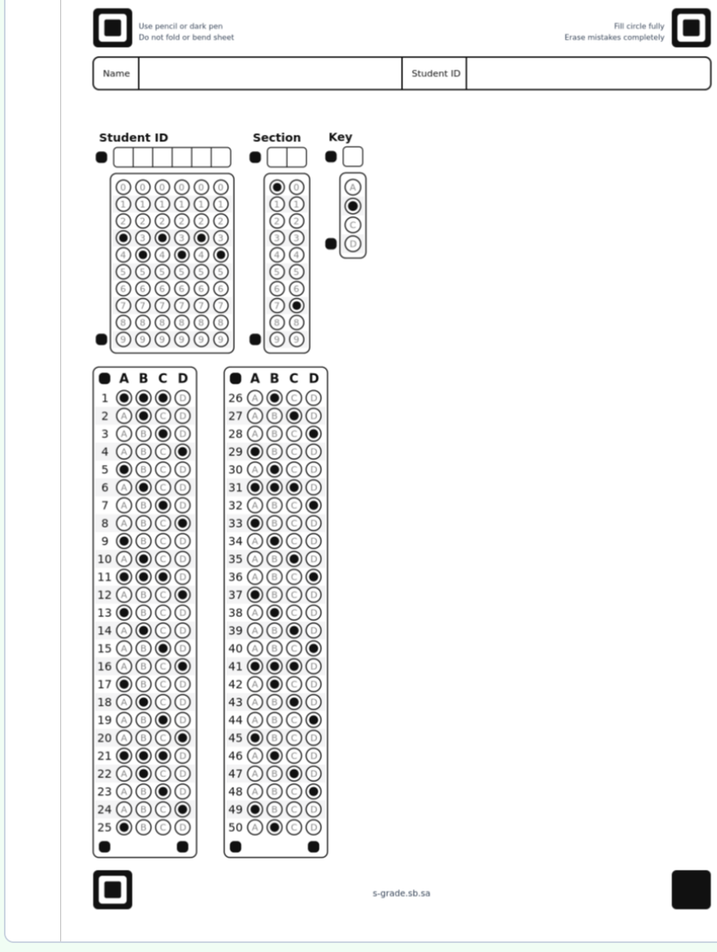
field	expected	actual	
studentId	`333444`	`333444`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`41`	`41`	✓

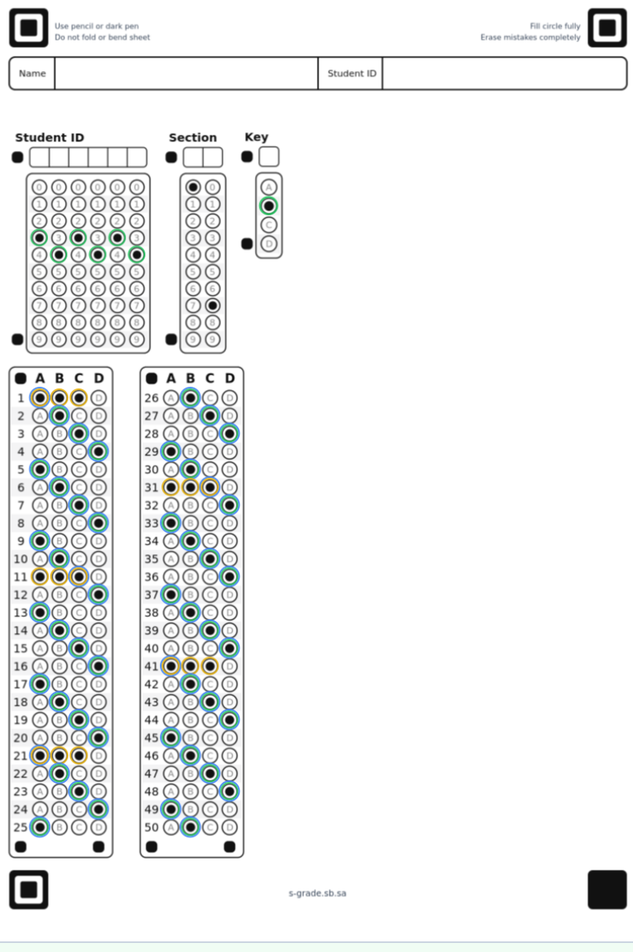
result.json

50q · triple-marked questions PASS

profile: `pristine` · 574 passed · 0 failed







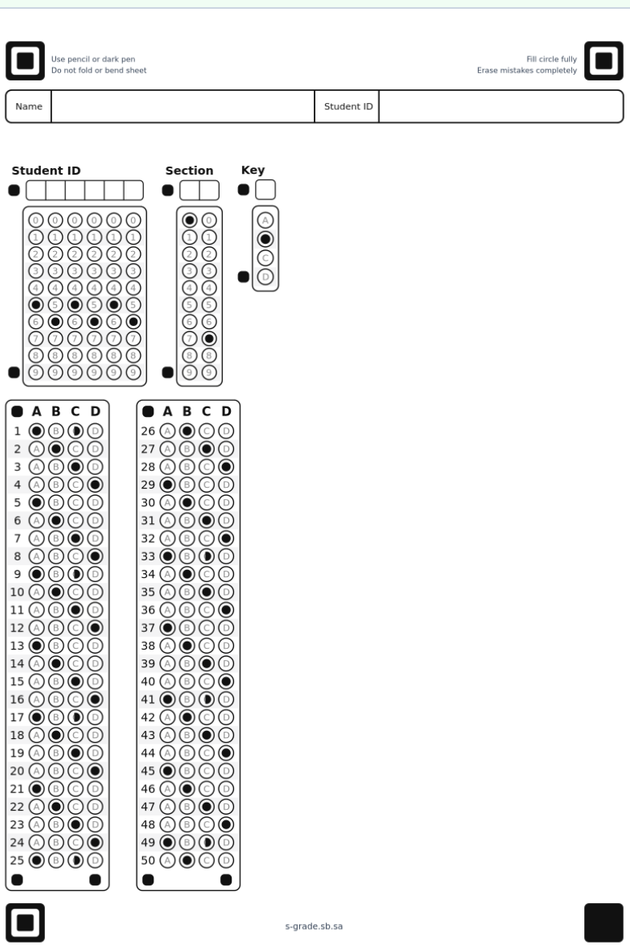
INPUT WARPED OVERLAY

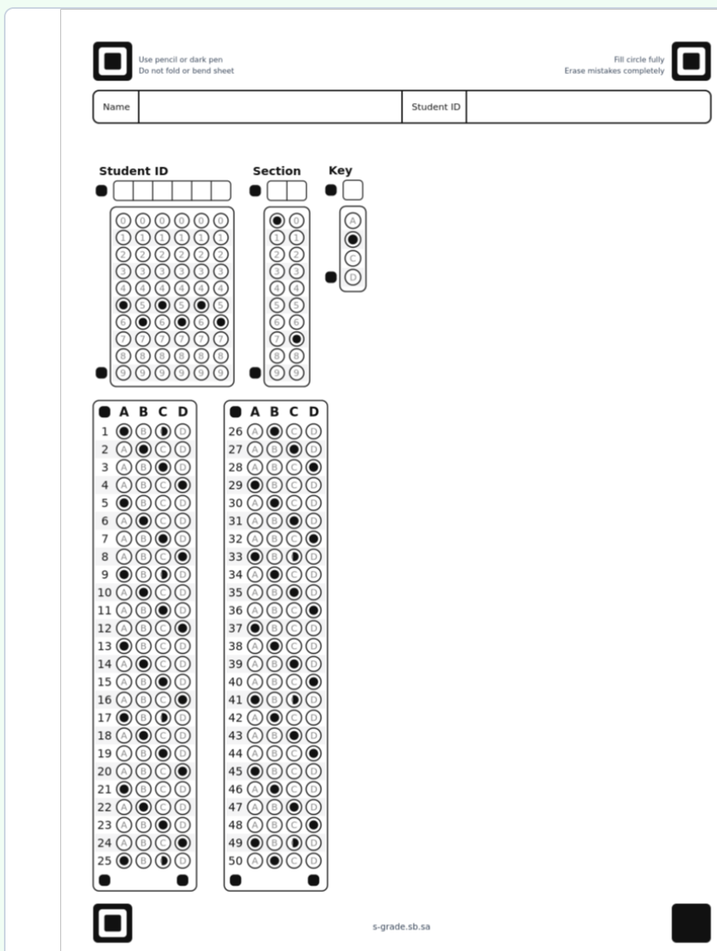
field	expected	actual	
studentId	`343434`	`343434`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`45`	`45`	✓

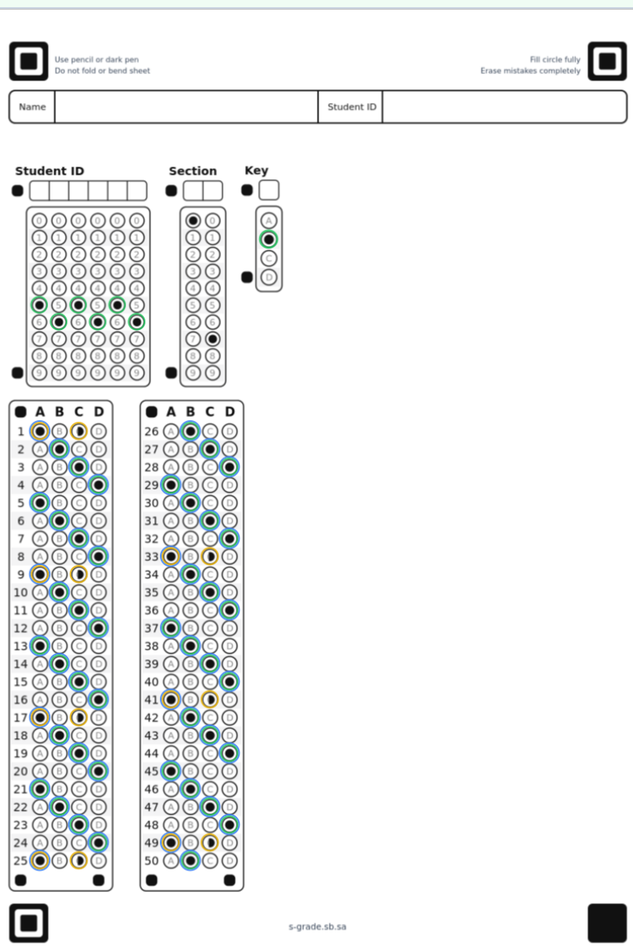
result.json

50q · uneven multi-fill (partial second mark) PASS

profile: `pristine` · 574 passed · 0 failed







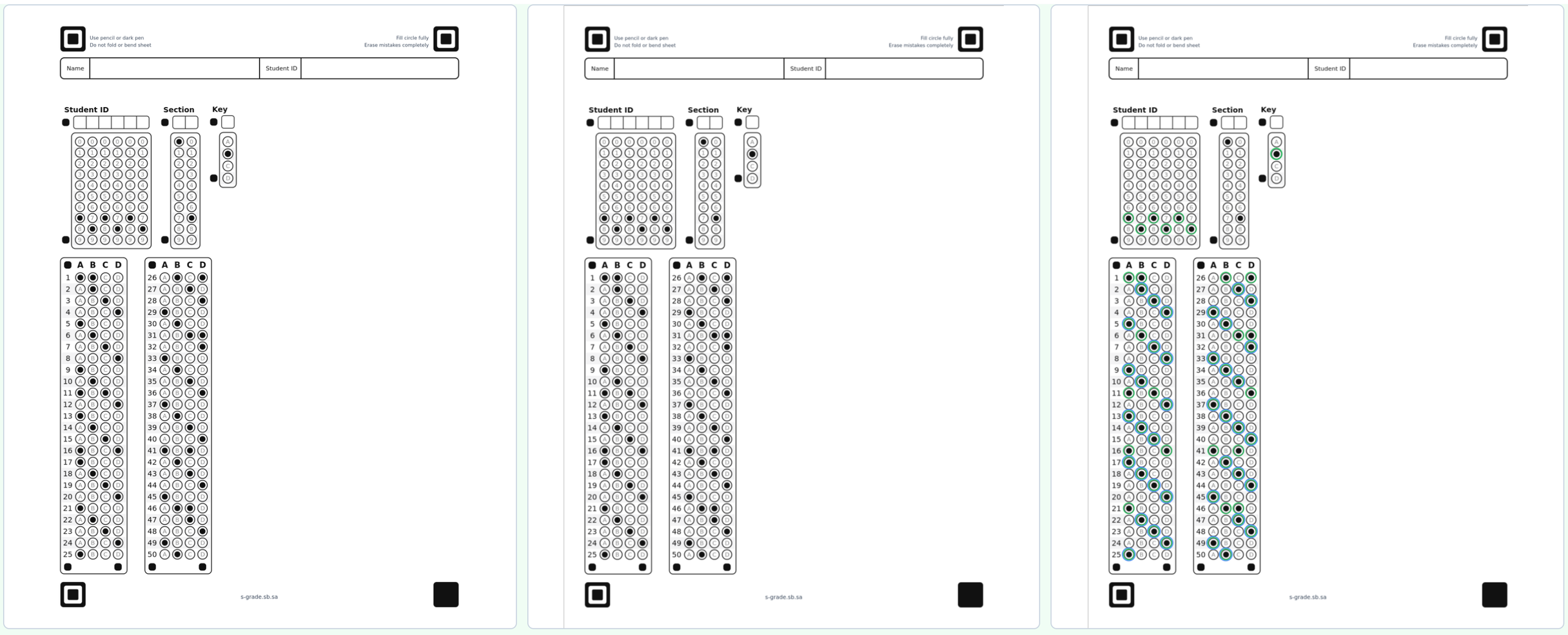
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`565656`	`565656`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`43`	`43`	✓

result.json

50q · multi-answer key (OR mode) PASS

profile: `pristine` · 574 passed · 0 failed



INPUT

WARPED

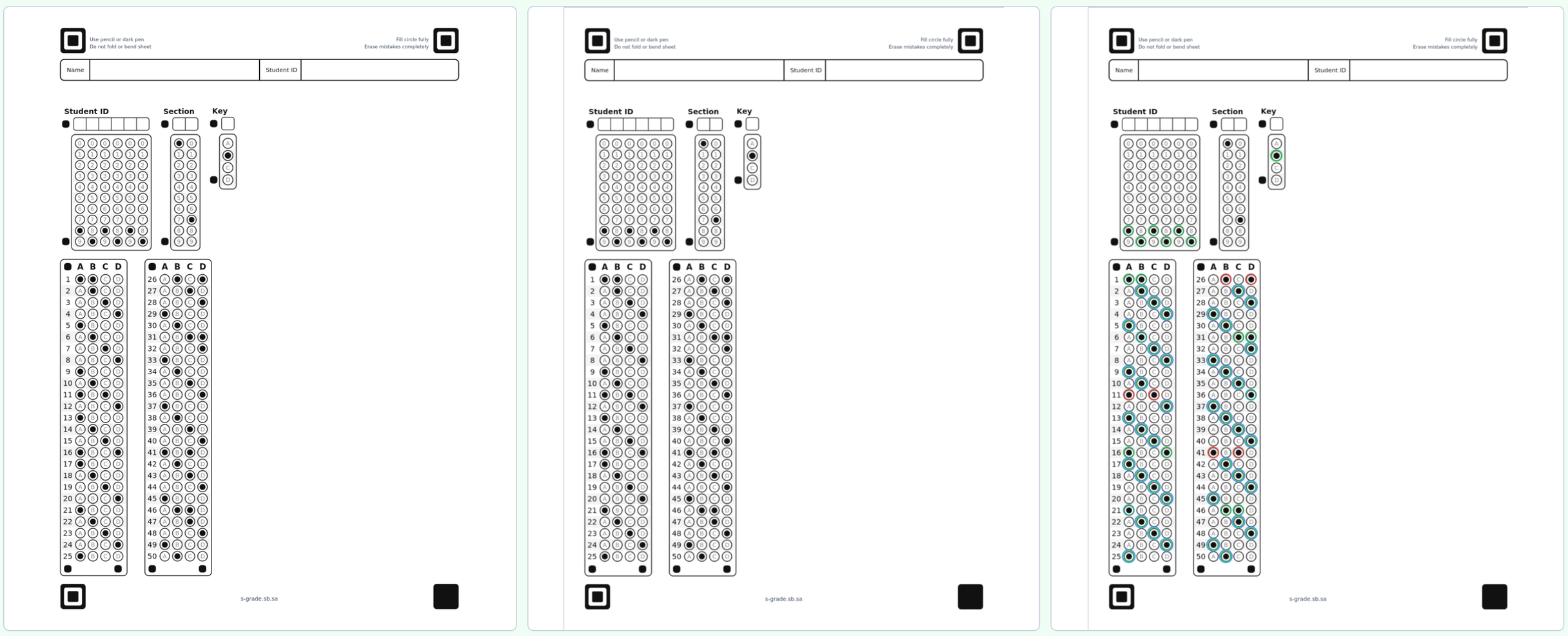
OVERLAY

field	expected	actual	
studentId	`787878`	`787878`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · multi-answer key (AND mode) PASS

profile: `pristine` · 574 passed · 0 failed



INPUT

WARPED

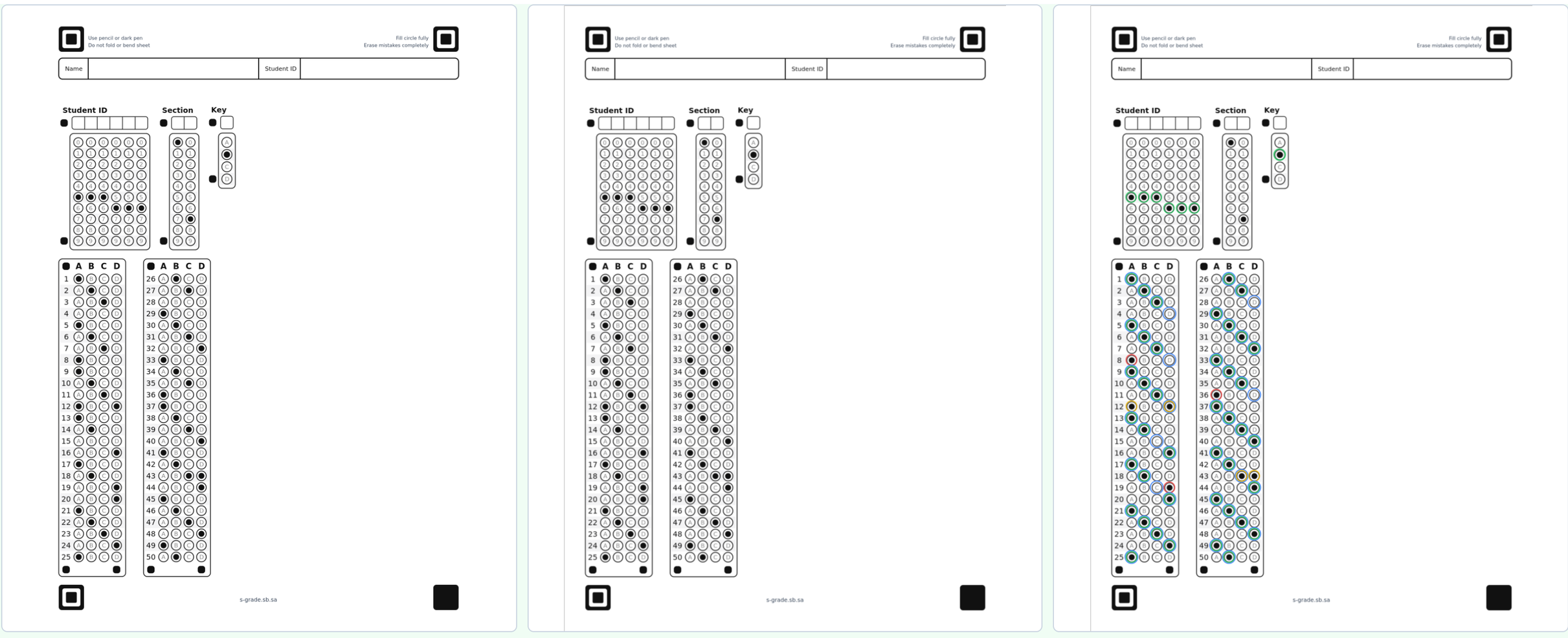
OVERLAY

field	expected	actual	
studentId	`898989`	`898989`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`45.5`	`45.5`	✓

result.json

50q · mixed (wrong + blank + multi) PASS

profile: `pristine` · 574 passed · 0 failed



INPUT

WARPED

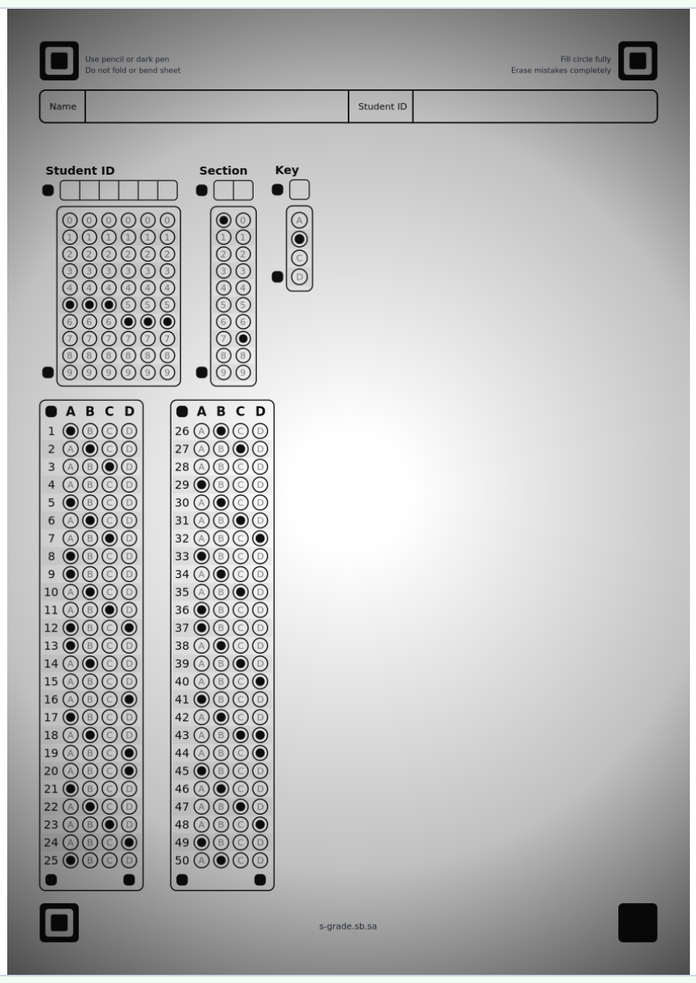
OVERLAY

field	expected	actual	
studentId	`555666`	`555666`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`42`	`42`	✓

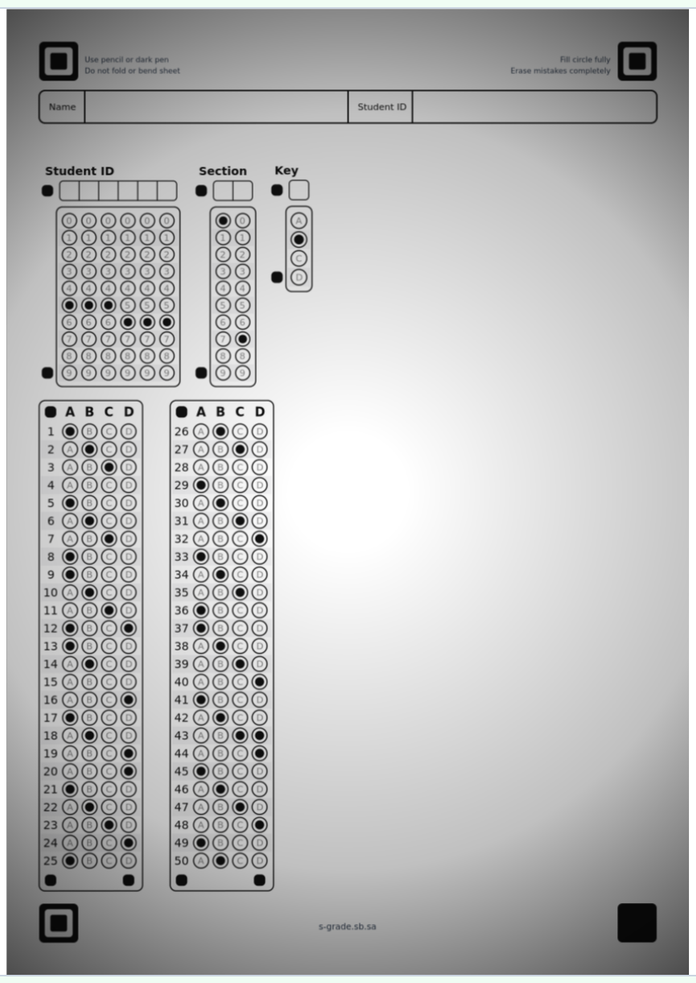
result.json

50q · mixed + lighting vignette PASS

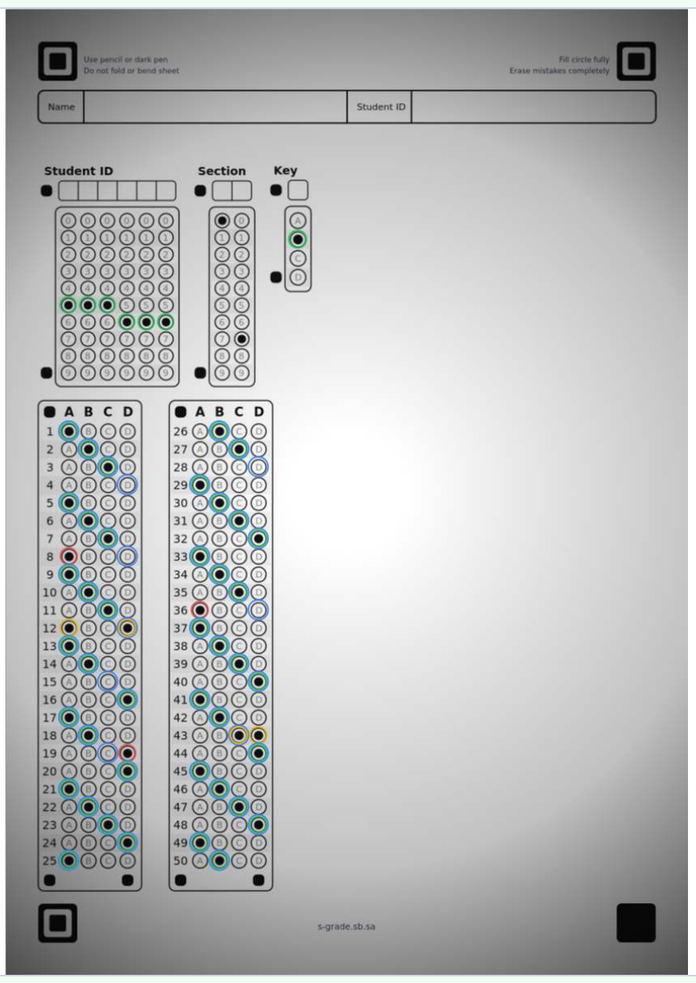
profile: `lighting_vignette` · 574 passed · 0 failed



INPUT



WARPED



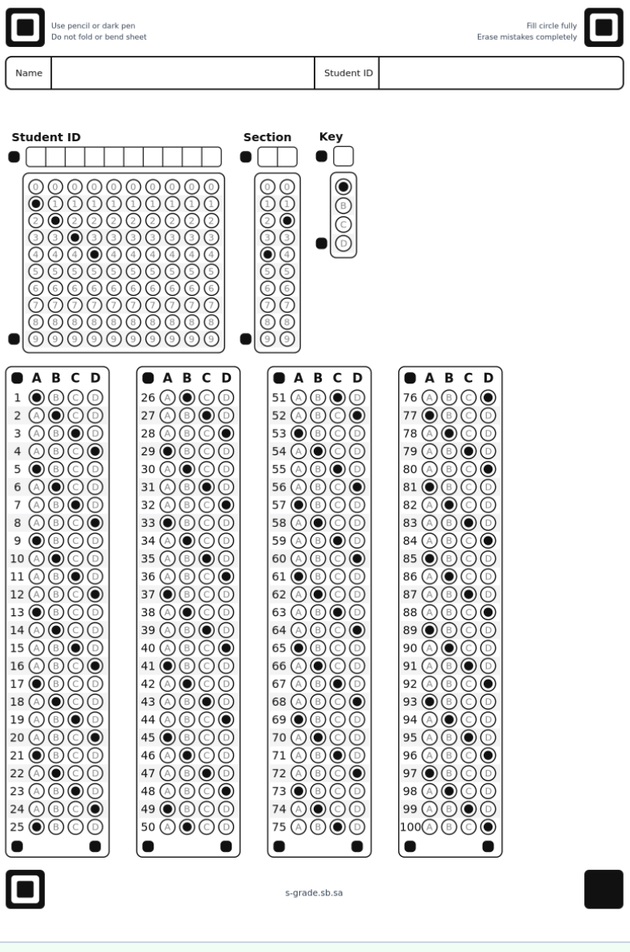
OVERLAY

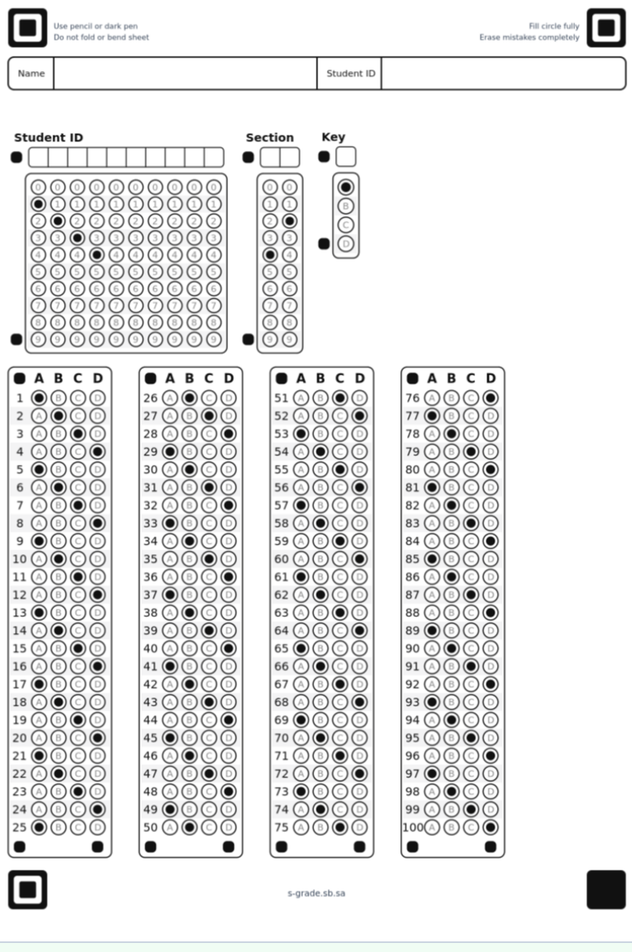
field	expected	actual	
studentId	`555666`	`555666`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`42`	`42`	✓

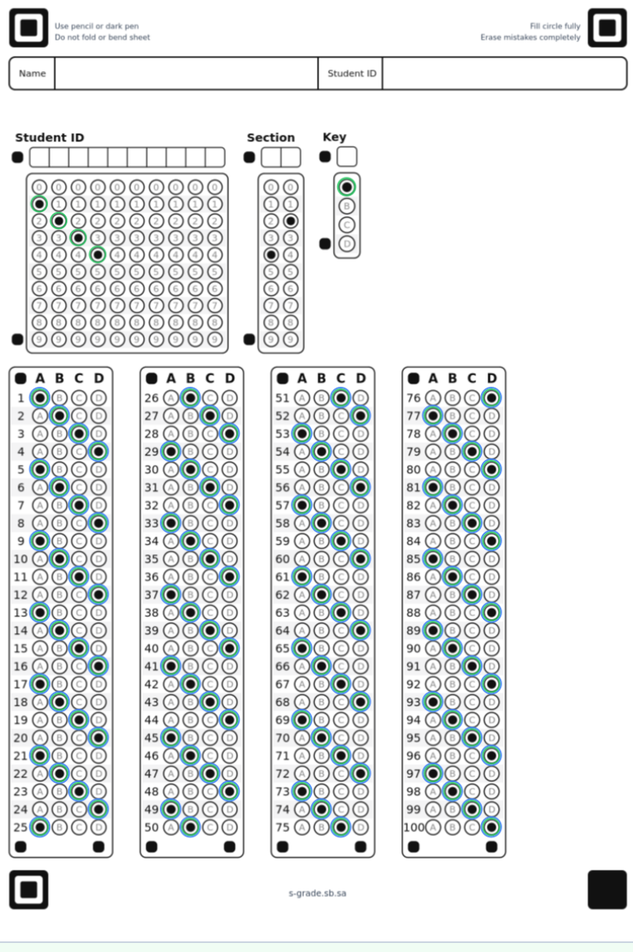
result.json

100q · 10-id, first 4 digits only PASS

profile: `pristine` · 1054 passed · 0 failed







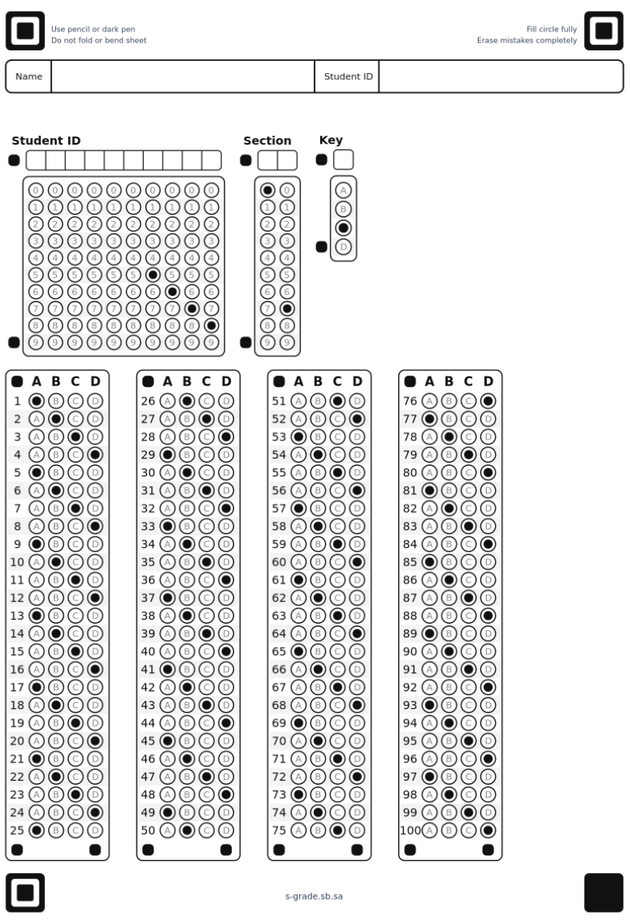
INPUT WARPED OVERLAY

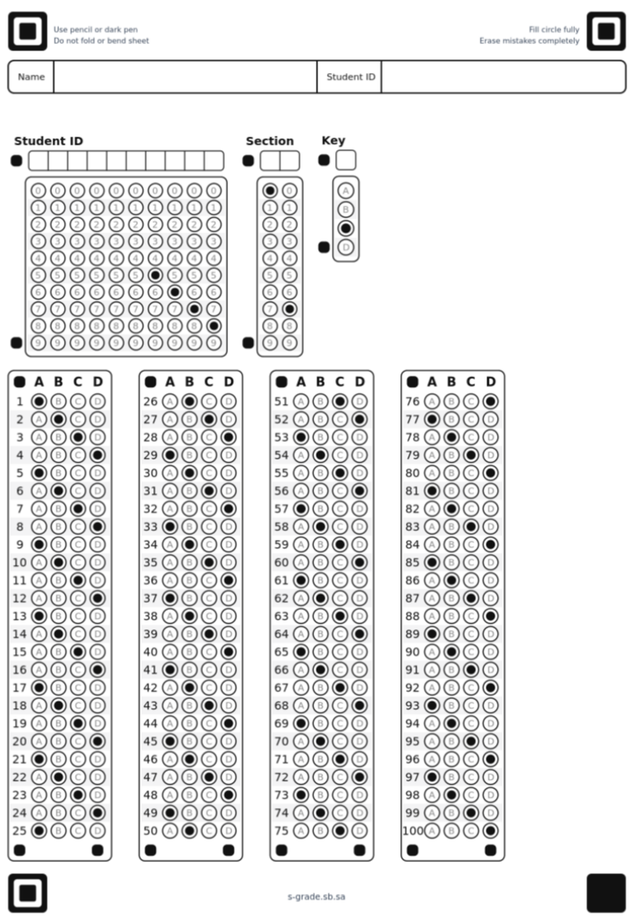
field	expected	actual	
studentId	`1234`	`1234`	✓
form	`A`	`A`	✓
section	`42`	`42`	✓
score	`100`	`100`	✓

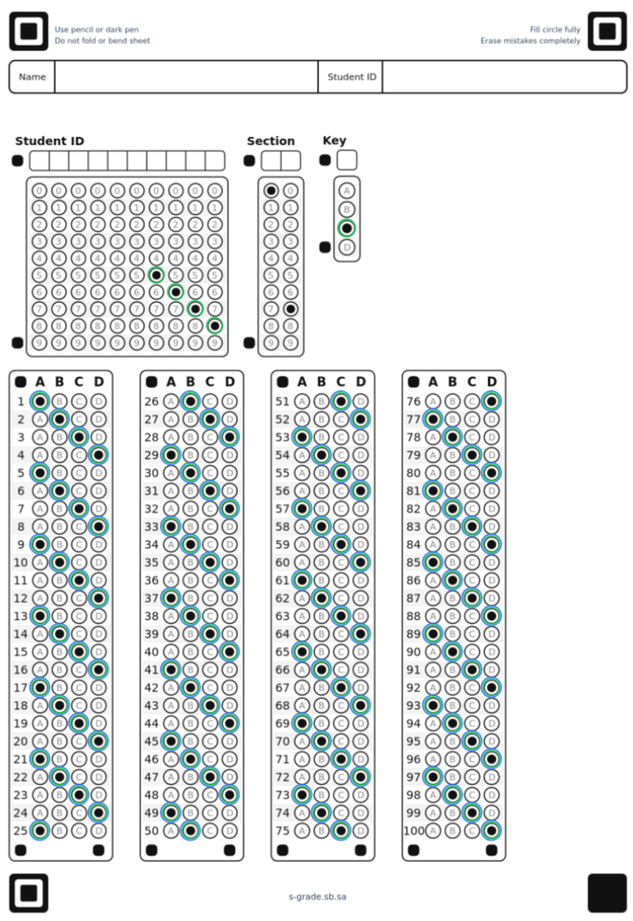
result.json

100q · 10-id, last 4 digits only PASS

profile: `pristine` · 1054 passed · 0 failed







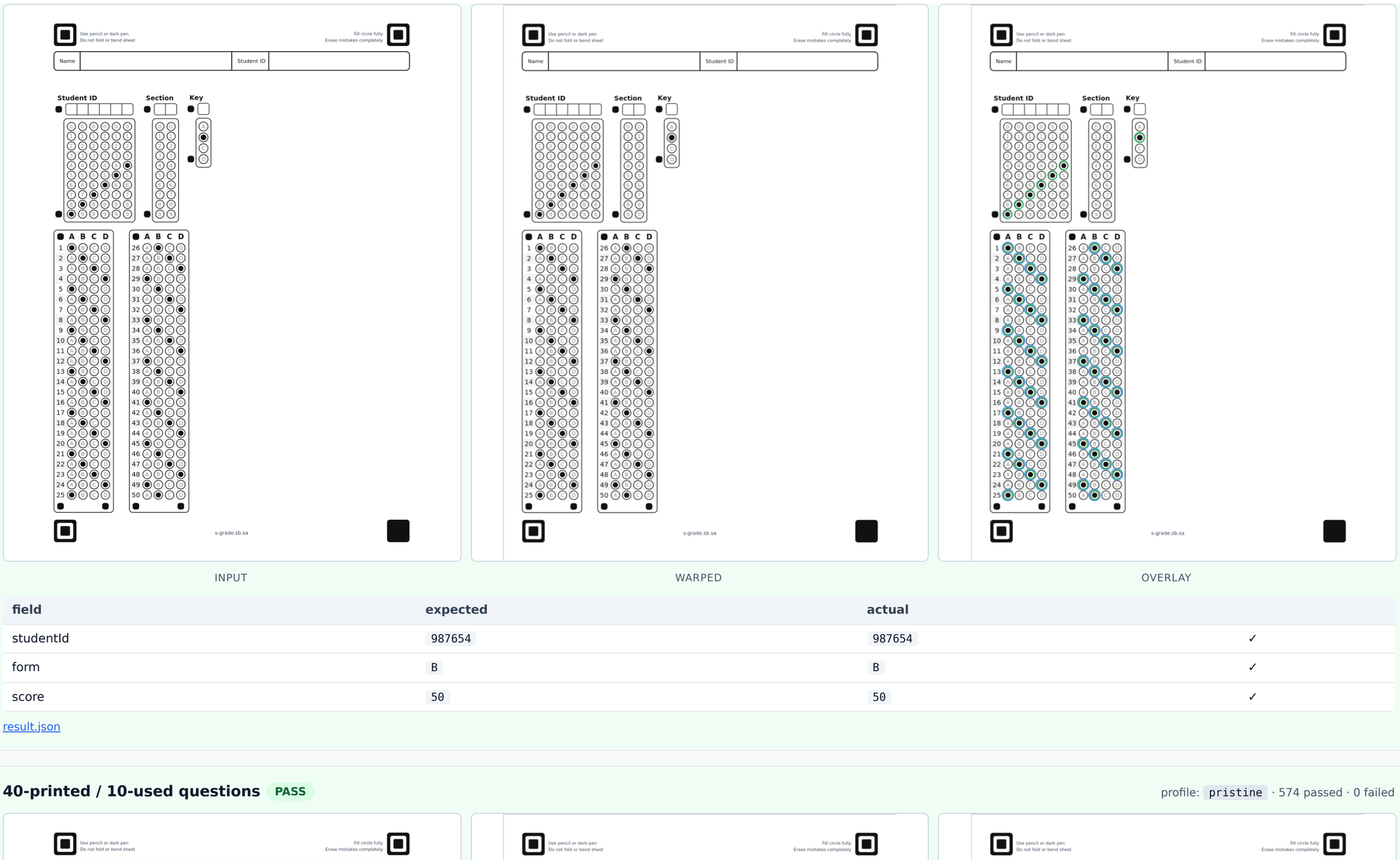
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`5678`	`5678`	✓
form	`C`	`C`	✓
section	`07`	`07`	✓
score	`100`	`100`	✓

result.json

50q · section left blank PASS

profile: `pristine` · 574 passed · 0 failed



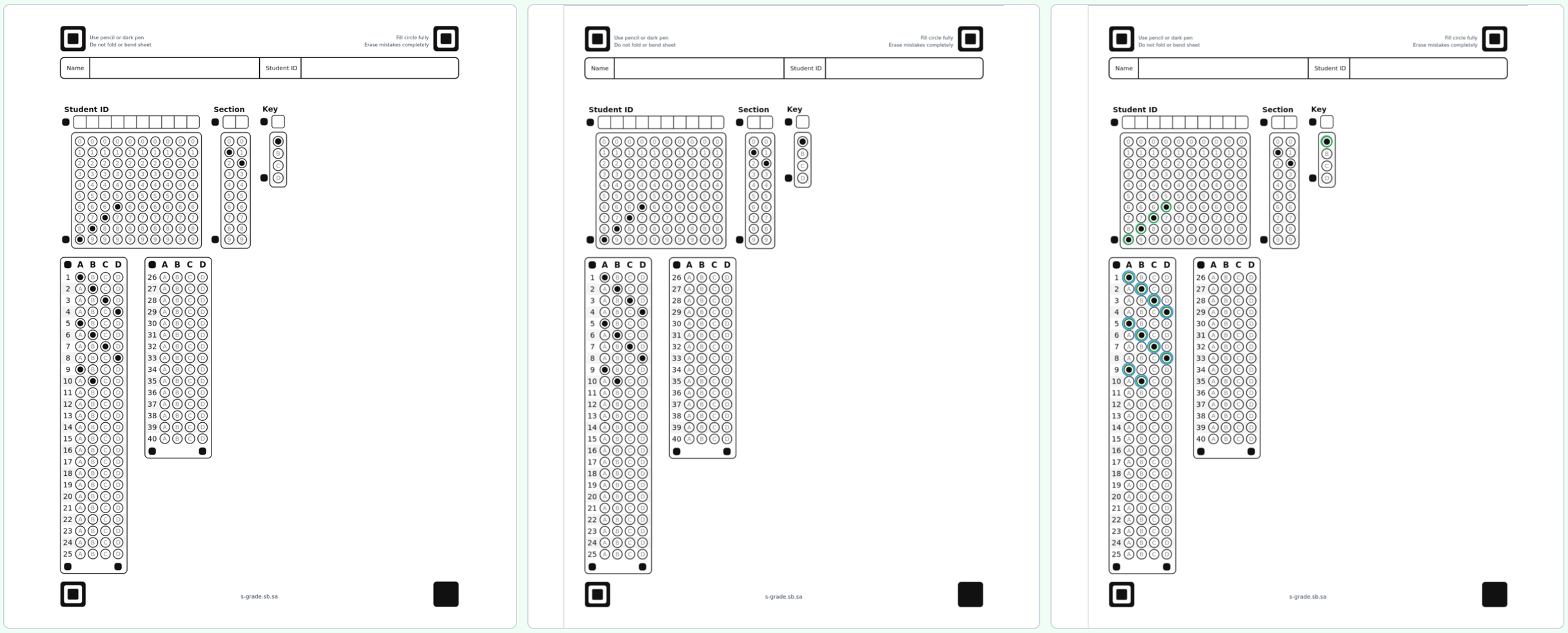
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
score	`50`	`50`	✓

result.json

40-printed / 10-used questions PASS

profile: `pristine` · 574 passed · 0 failed



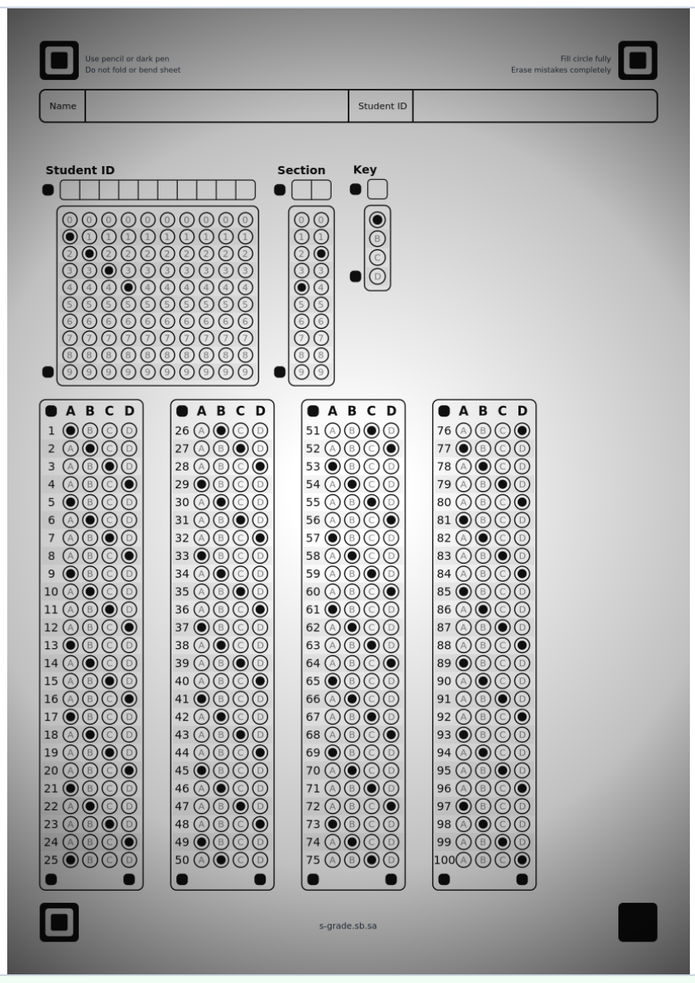
INPUT WARPED OVERLAY

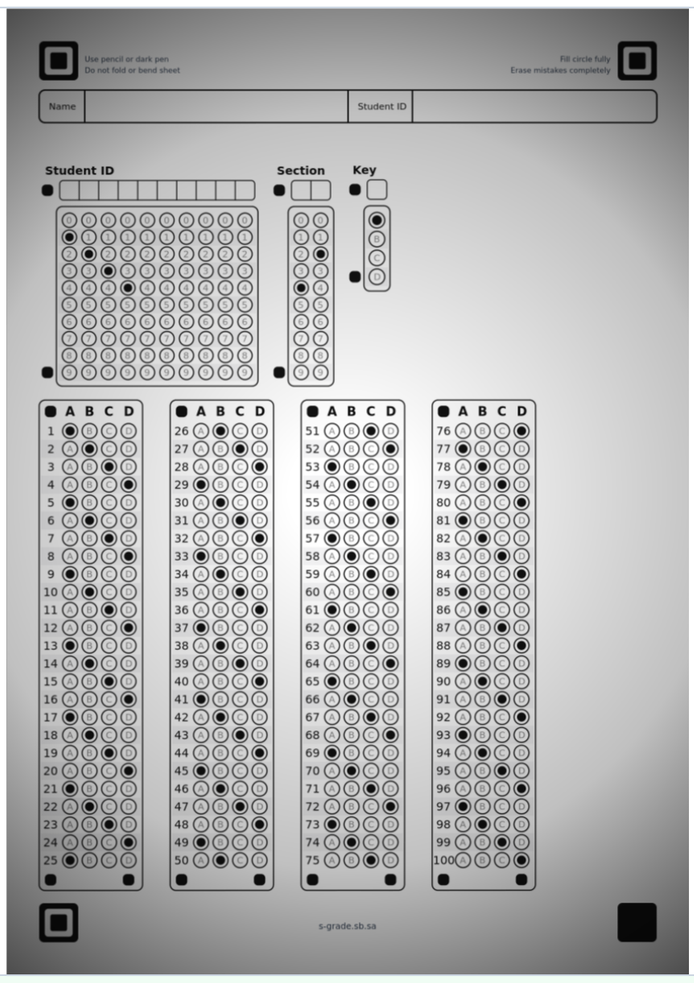
field	expected	actual	
studentId	`9876`	`9876`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`10`	`10`	✓

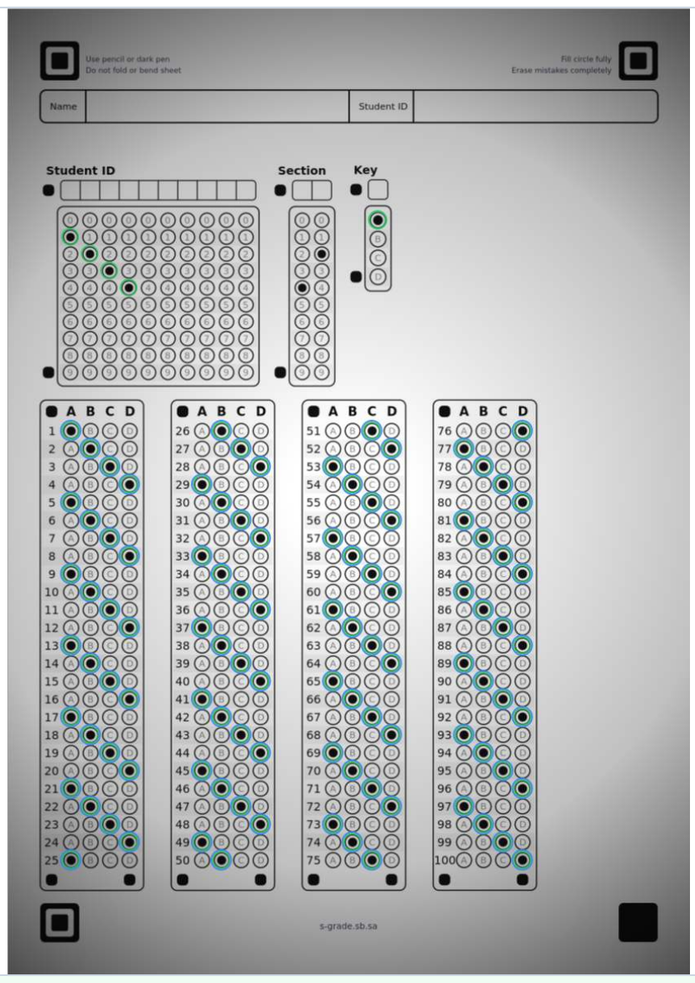
result.json

100q · 10-id first 4 + lighting vignette PASS

profile: `lighting_vignette` · 1054 passed · 0 failed







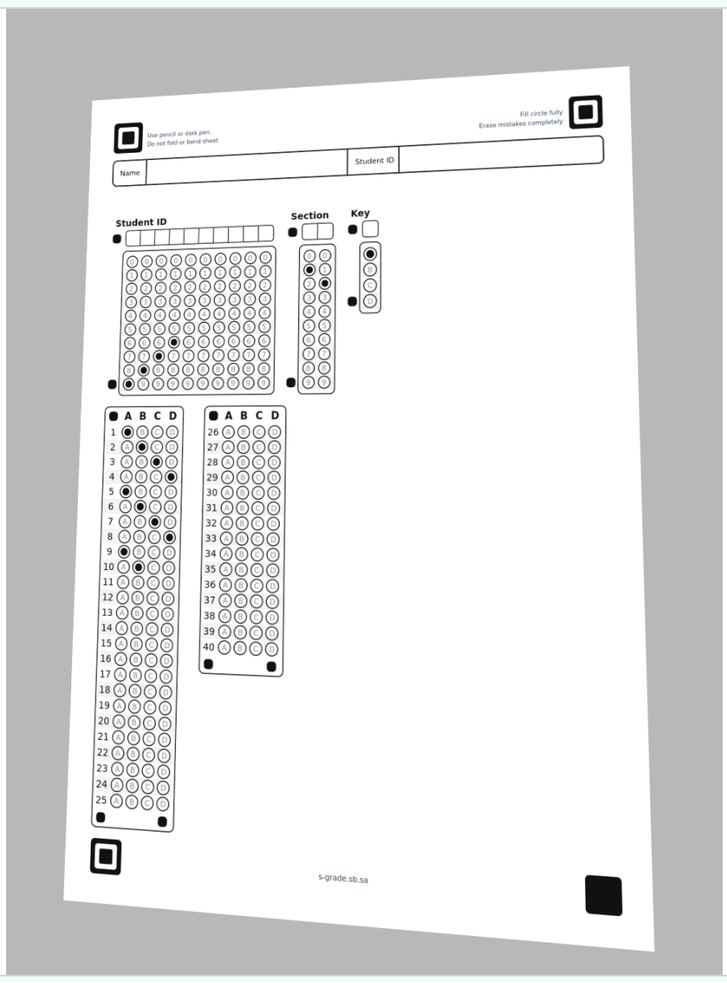
INPUT WARPED OVERLAY

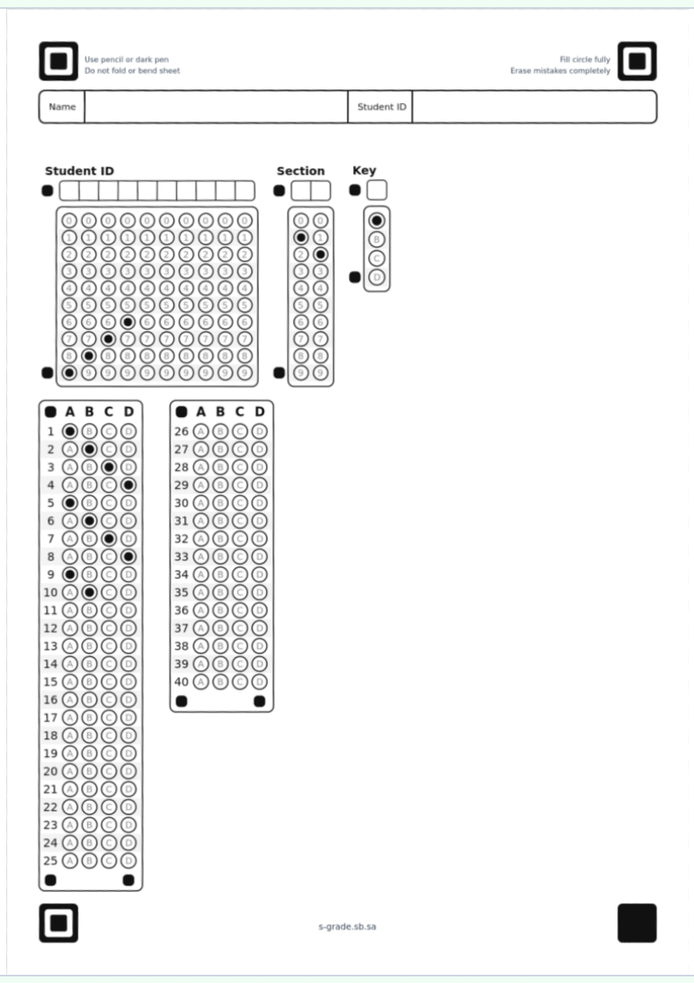
field	expected	actual	
studentId	`1234`	`1234`	✓
form	`A`	`A`	✓
section	`42`	`42`	✓
score	`100`	`100`	✓

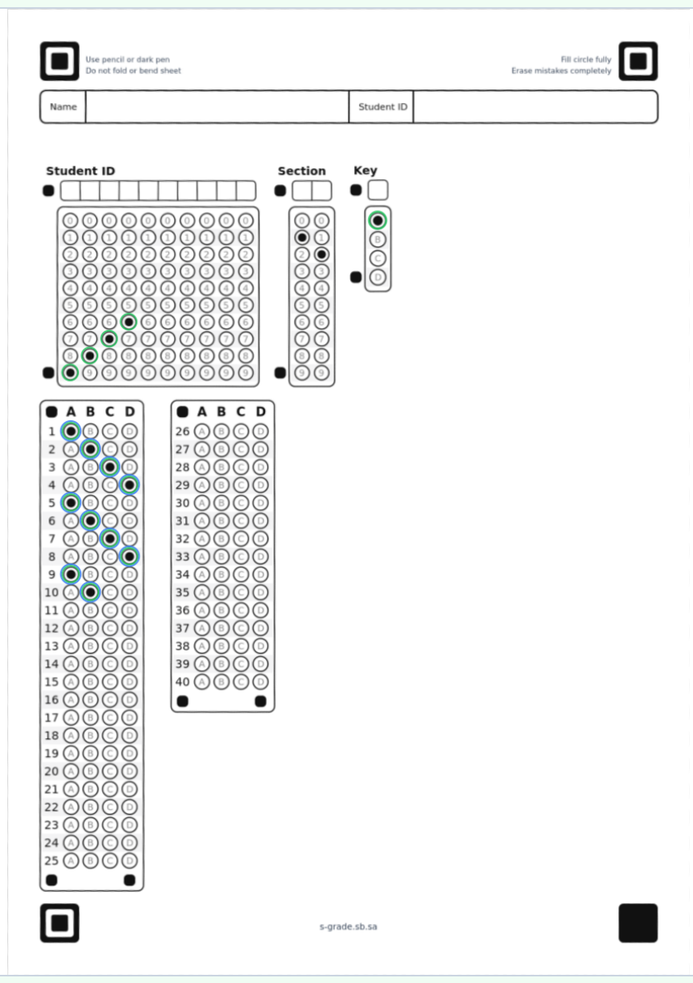
result.json

40-printed / 10-used + mild perspective PASS

profile: `perspective_mild` · 574 passed · 0 failed







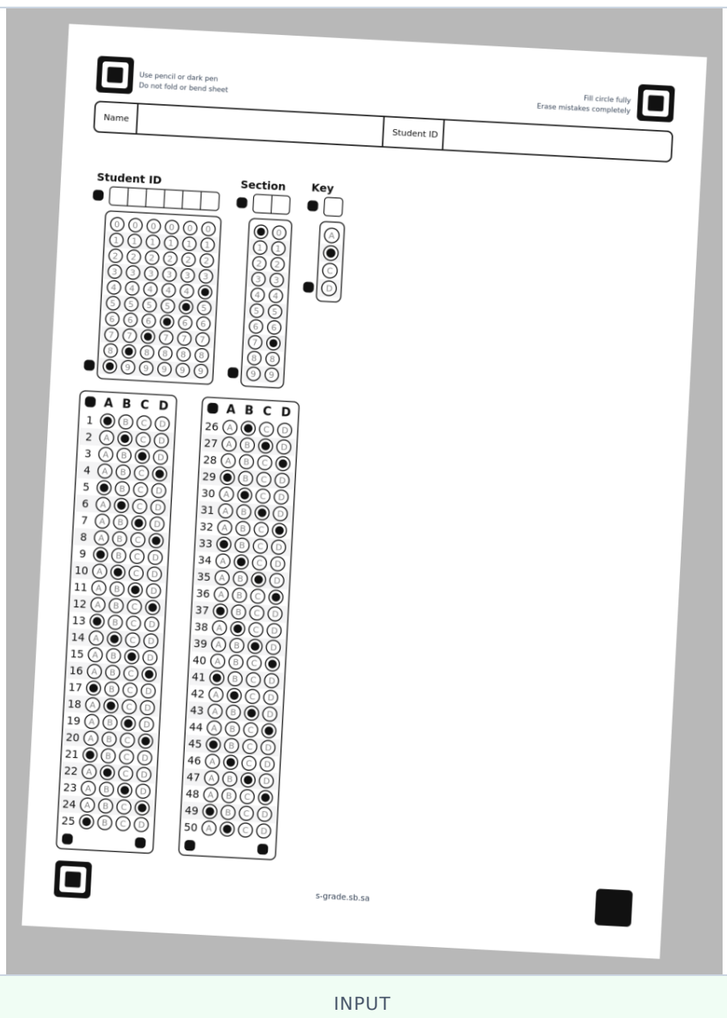
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`9876`	`9876`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`10`	`10`	✓

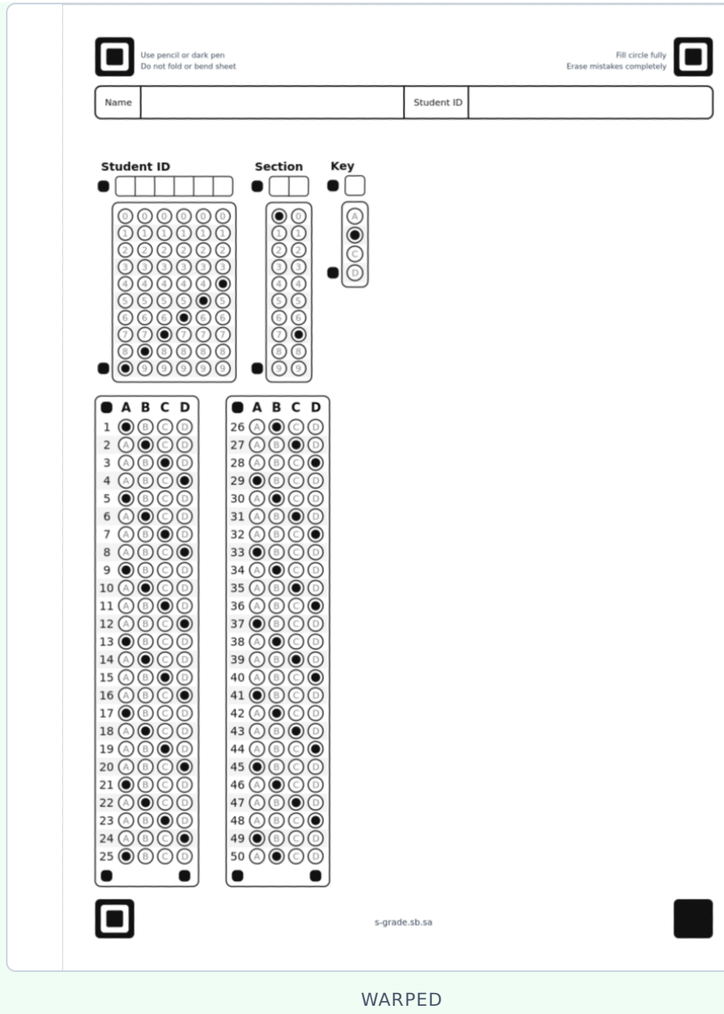
result.json

50q · rotated -3° PASS

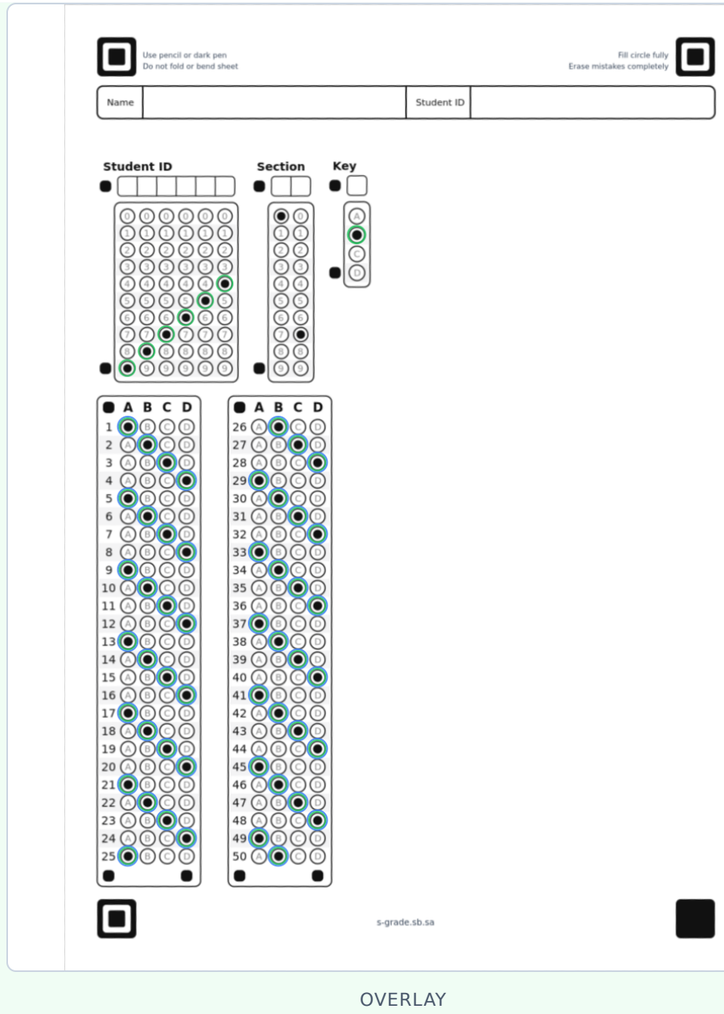
profile: `rotated_neg3deg` · 574 passed · 0 failed



INPUT



WARPED



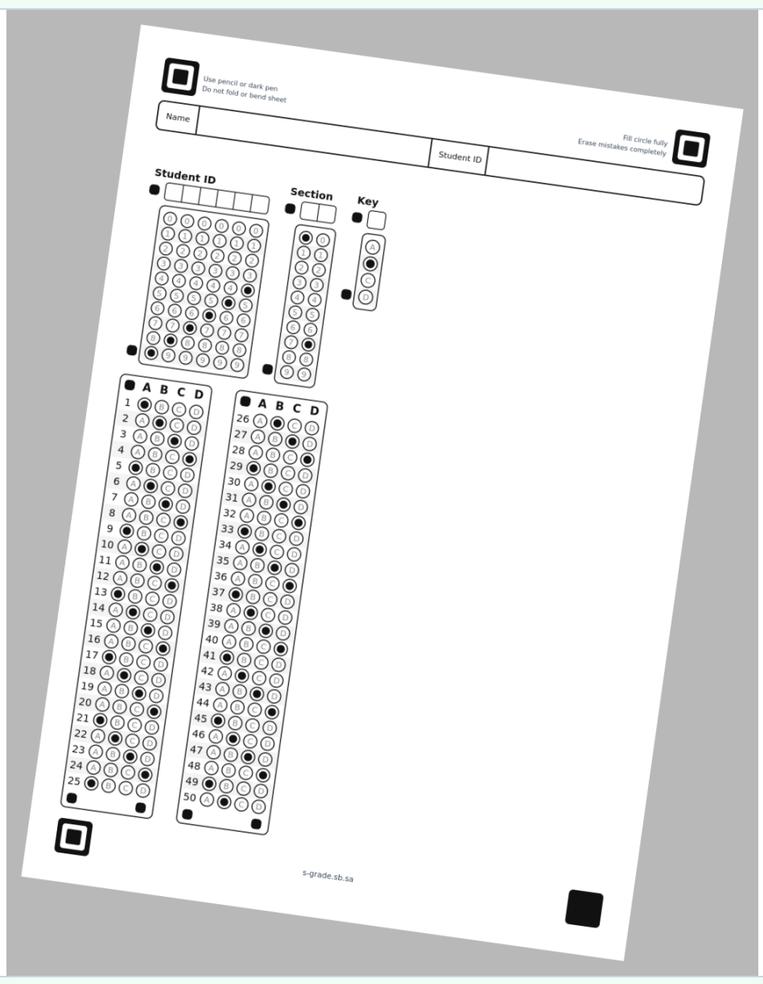
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

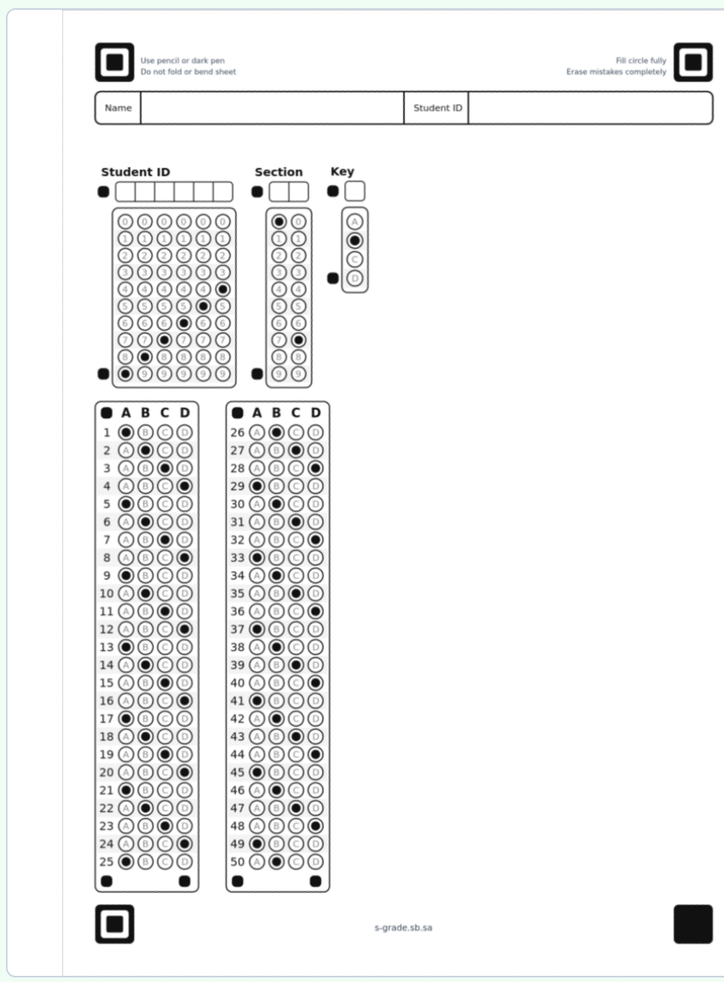
result.json

50q · rotated -8° PASS

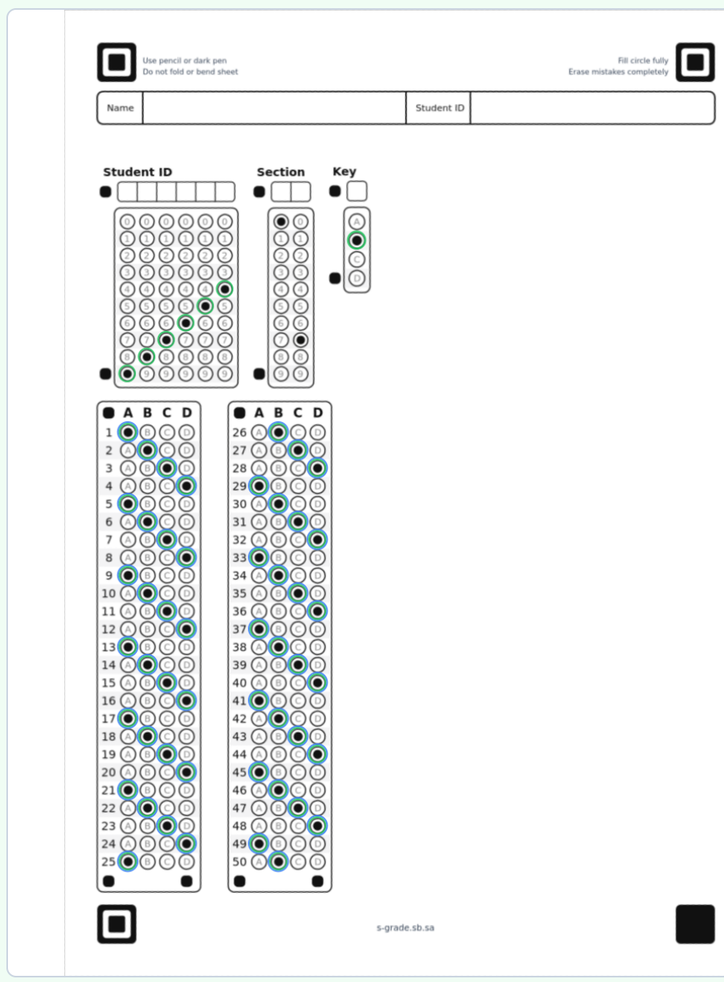
profile: `rotated_neg8deg` · 574 passed · 0 failed



INPUT



WARPED



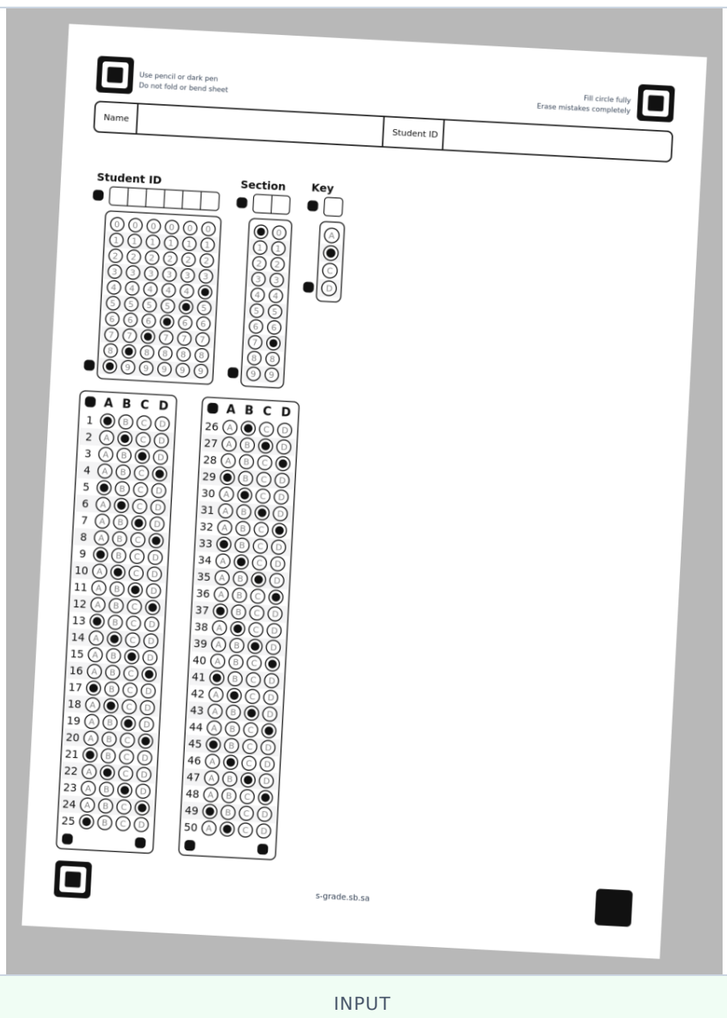
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

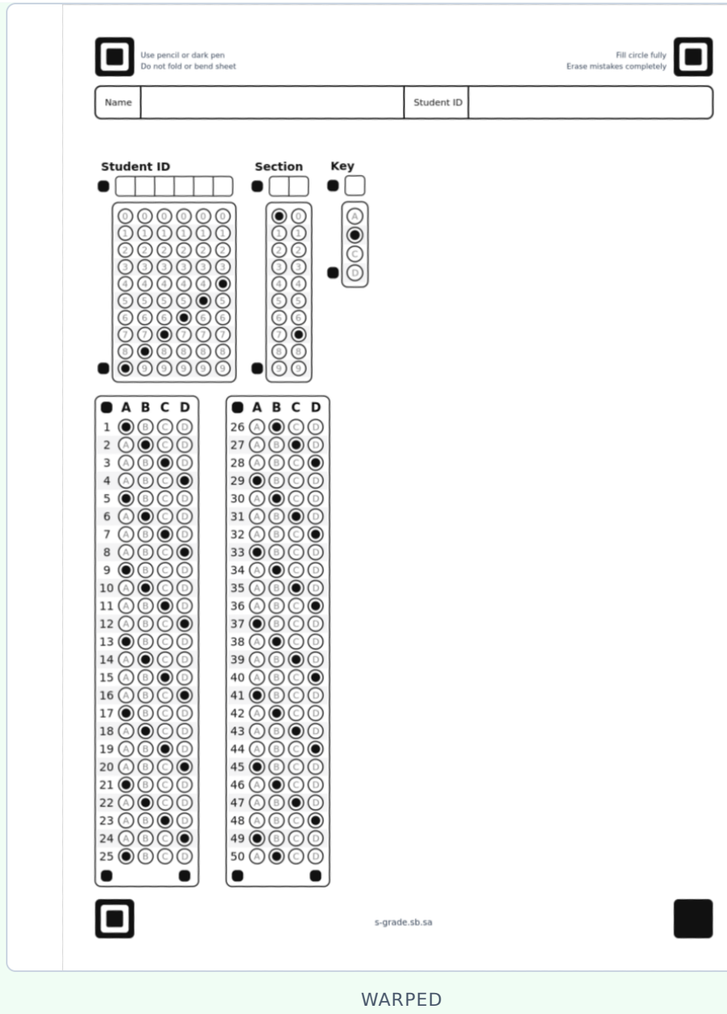
result.json

50q · rotated 3° PASS

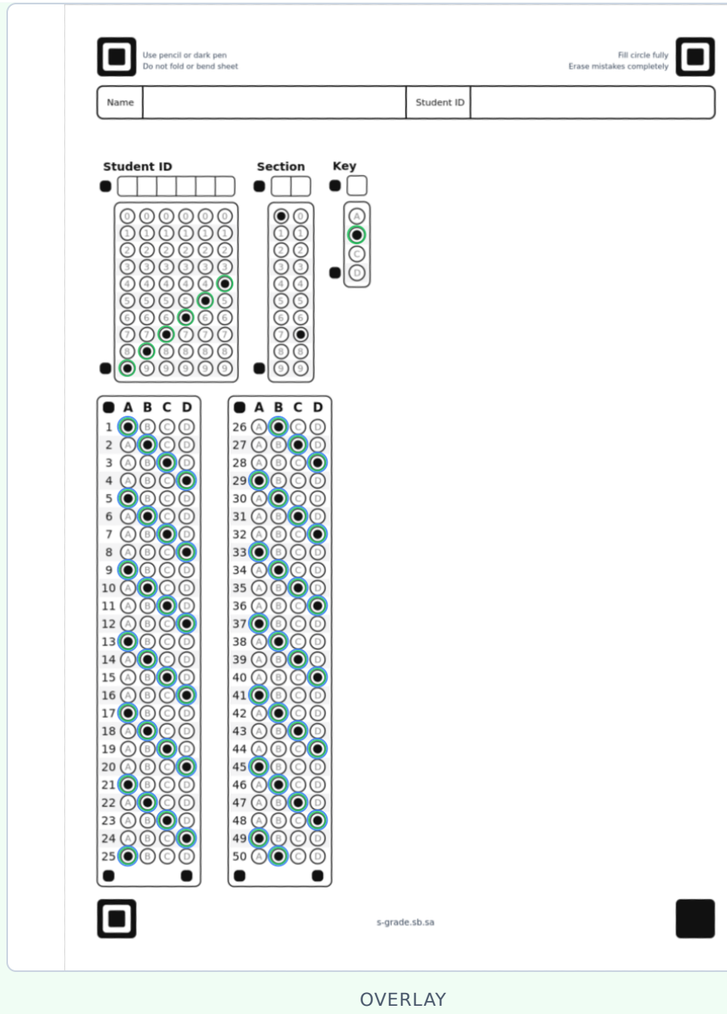
profile: `rotated_3deg` · 574 passed · 0 failed



INPUT



WARPED



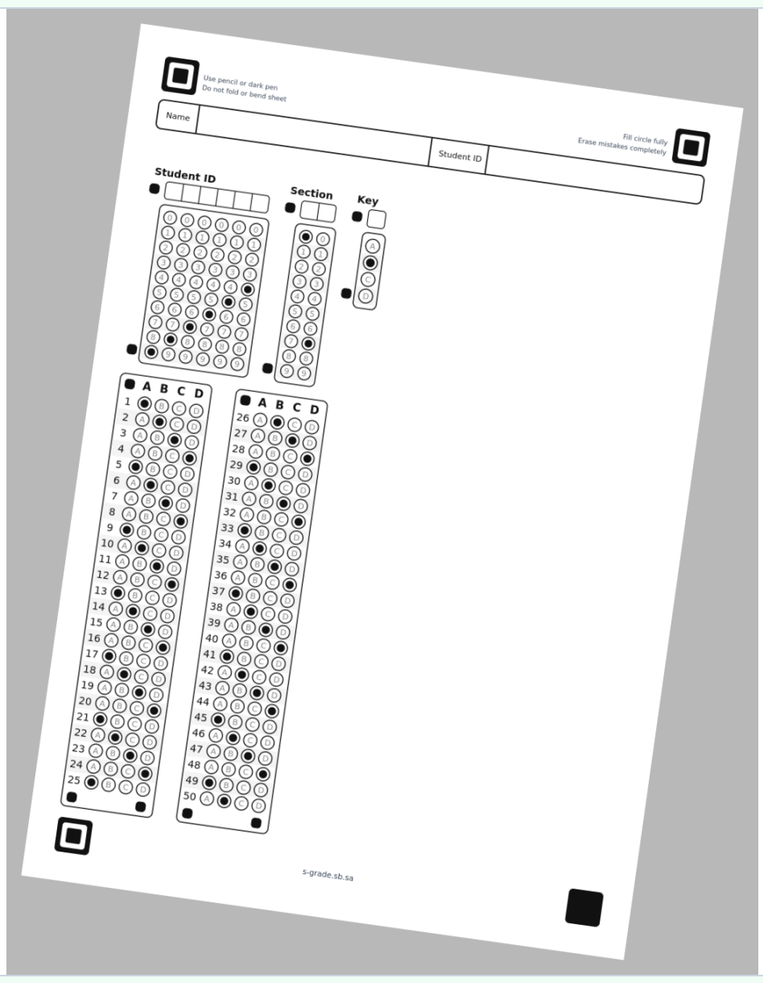
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

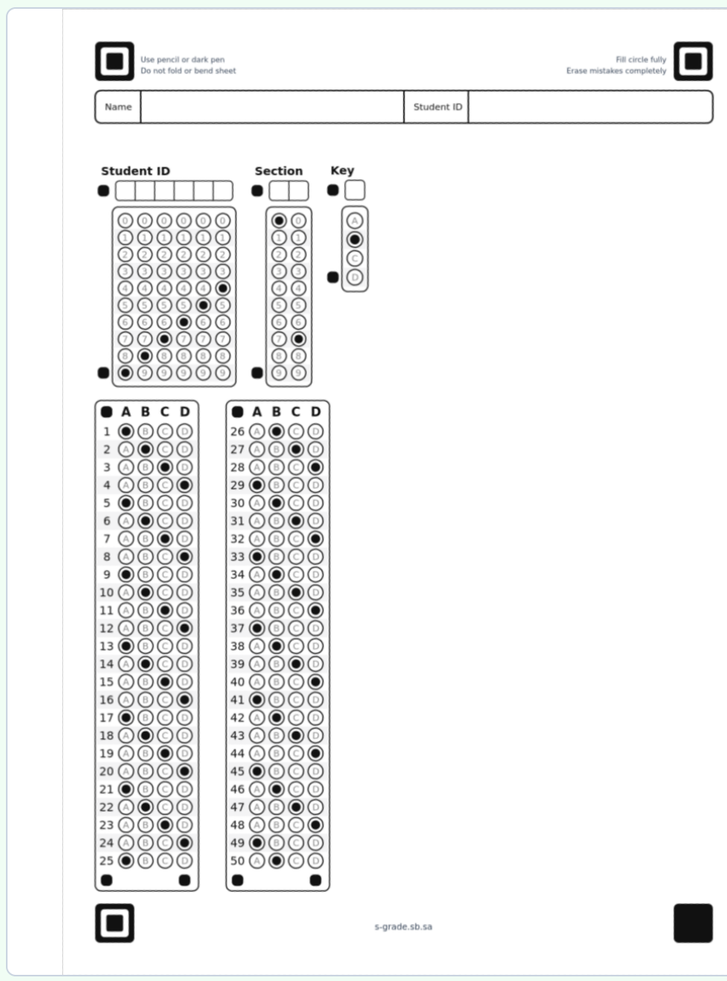
result.json

50q · rotated 8° PASS

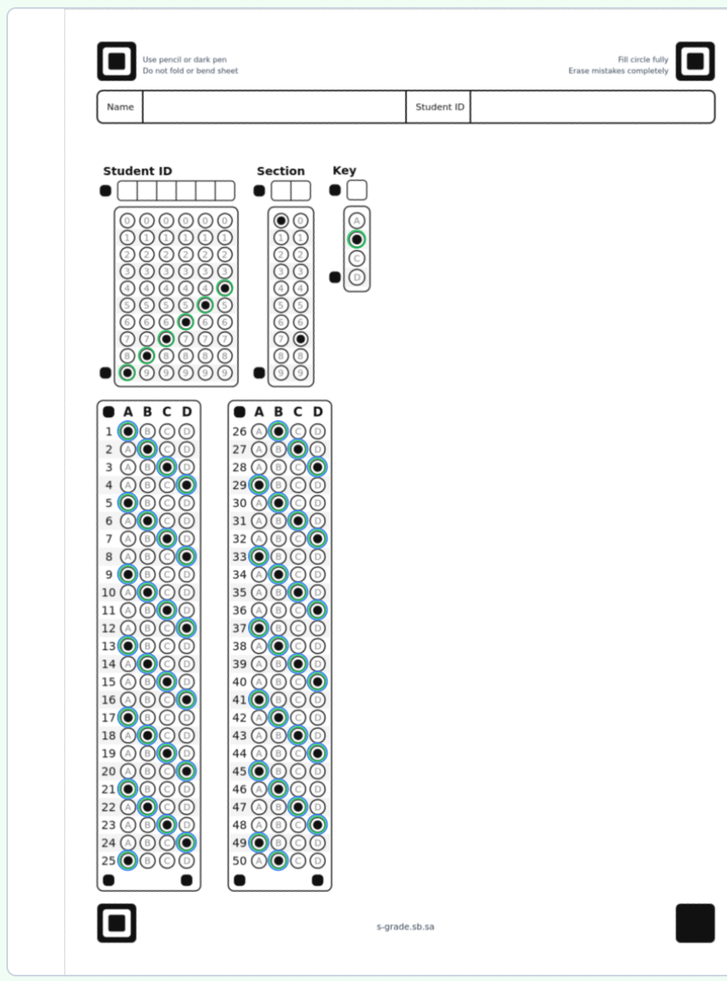
profile: `rotated_8deg` · 574 passed · 0 failed



INPUT



WARPED



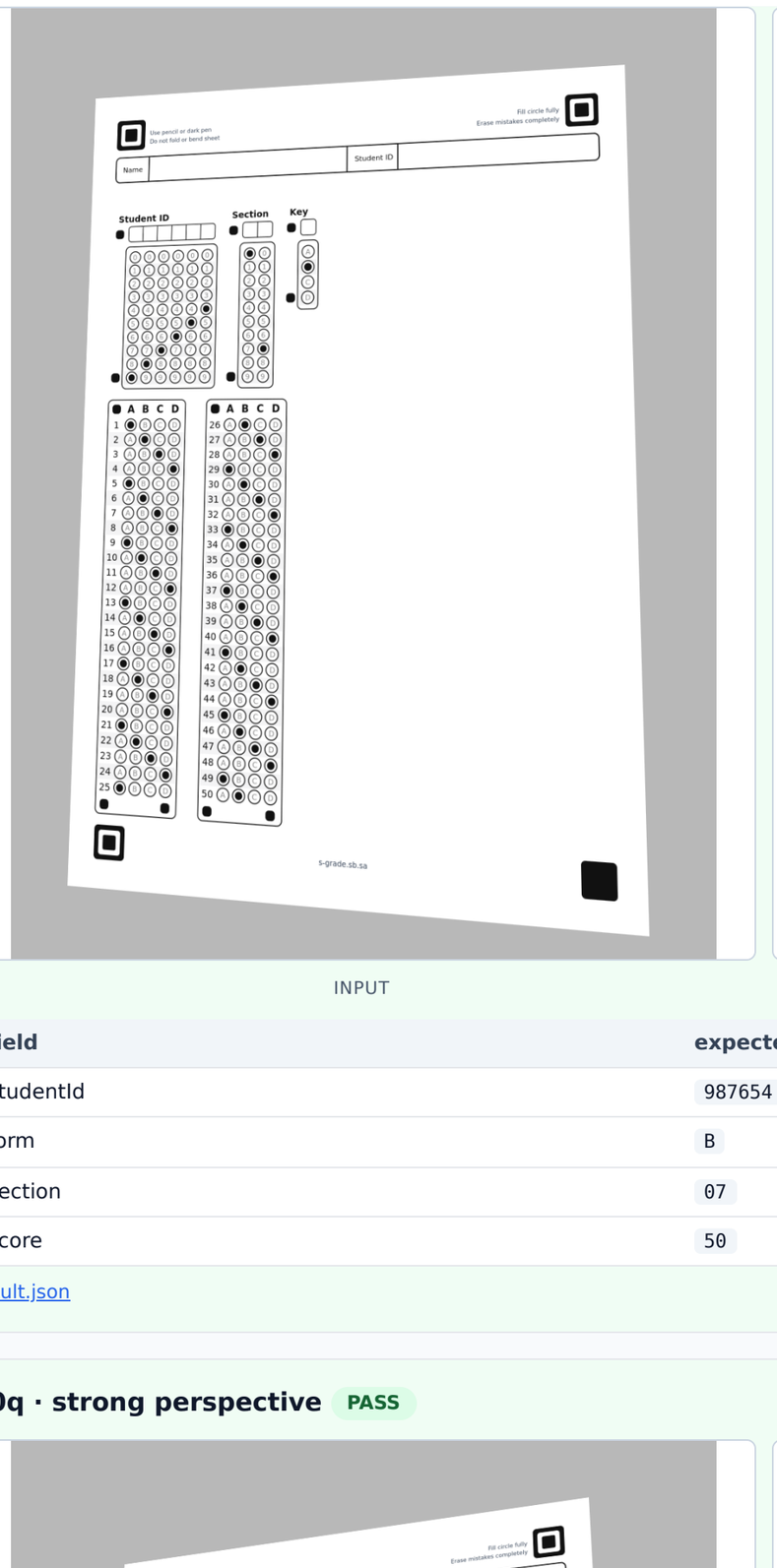
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

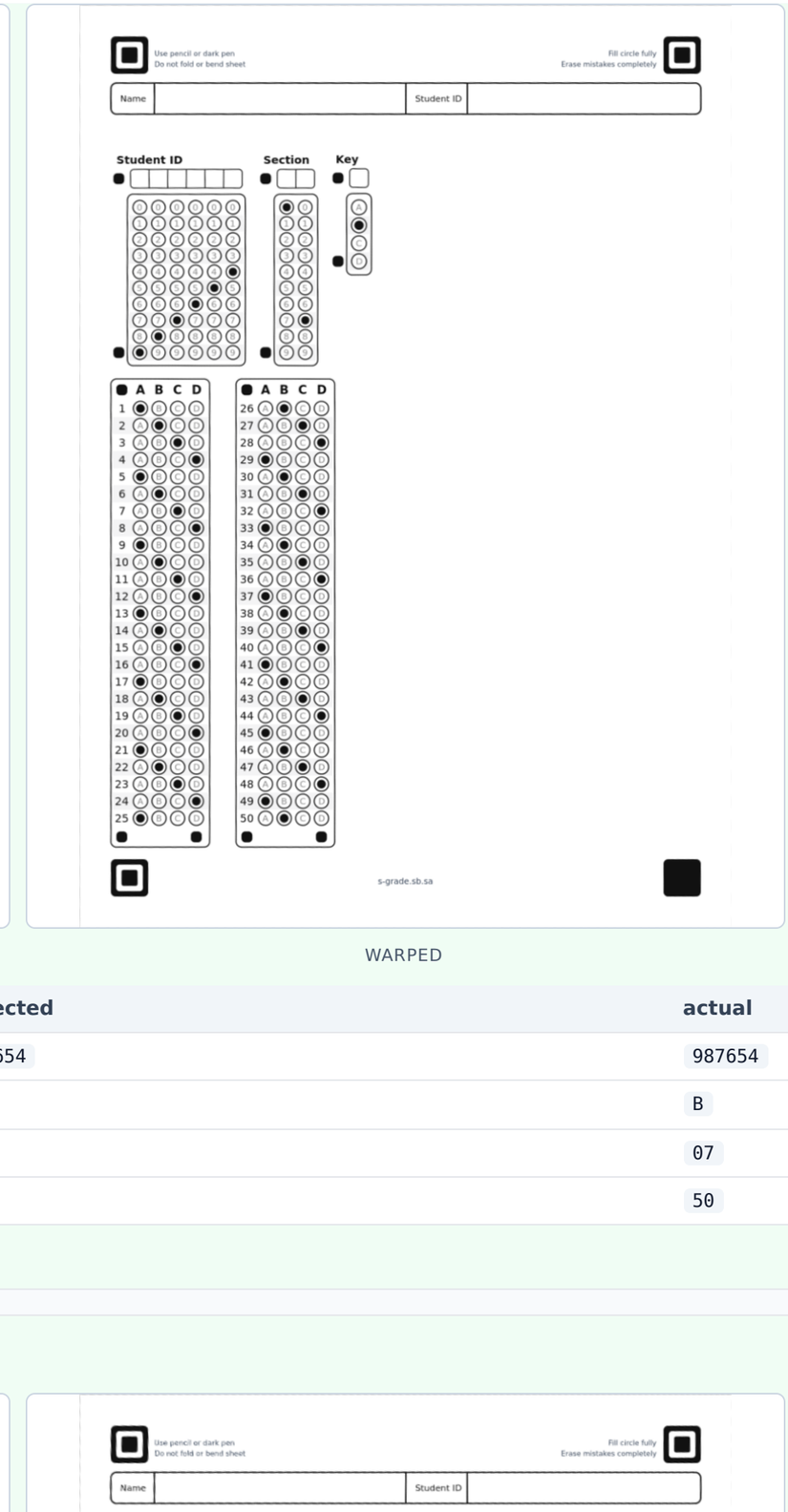
result.json

50q · mild perspective PASS

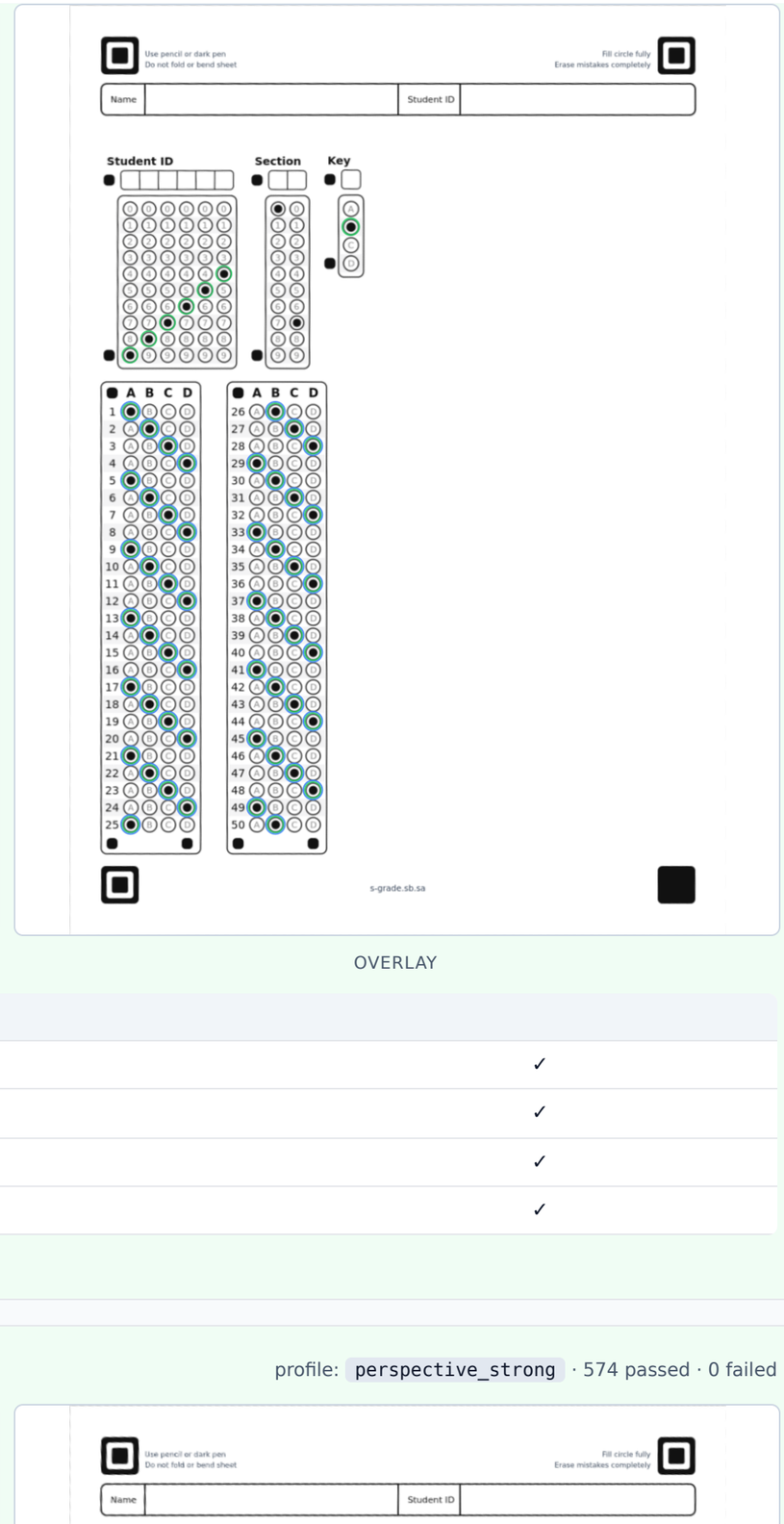
profile: `perspective_mild` · 574 passed · 0 failed



INPUT



WARPED



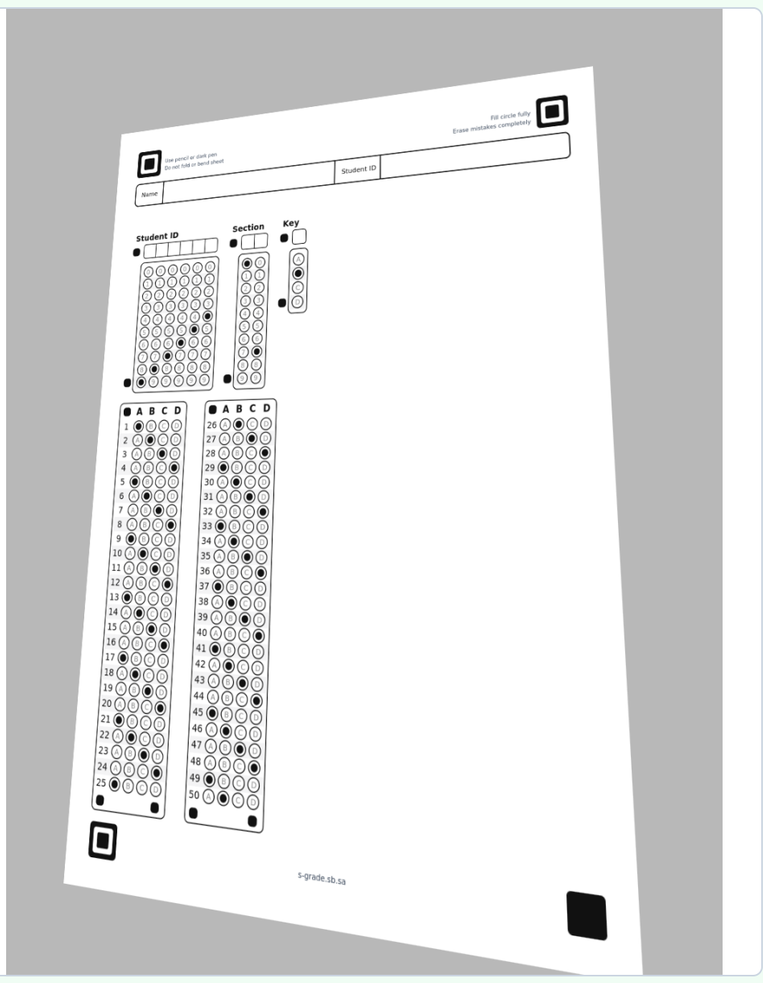
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

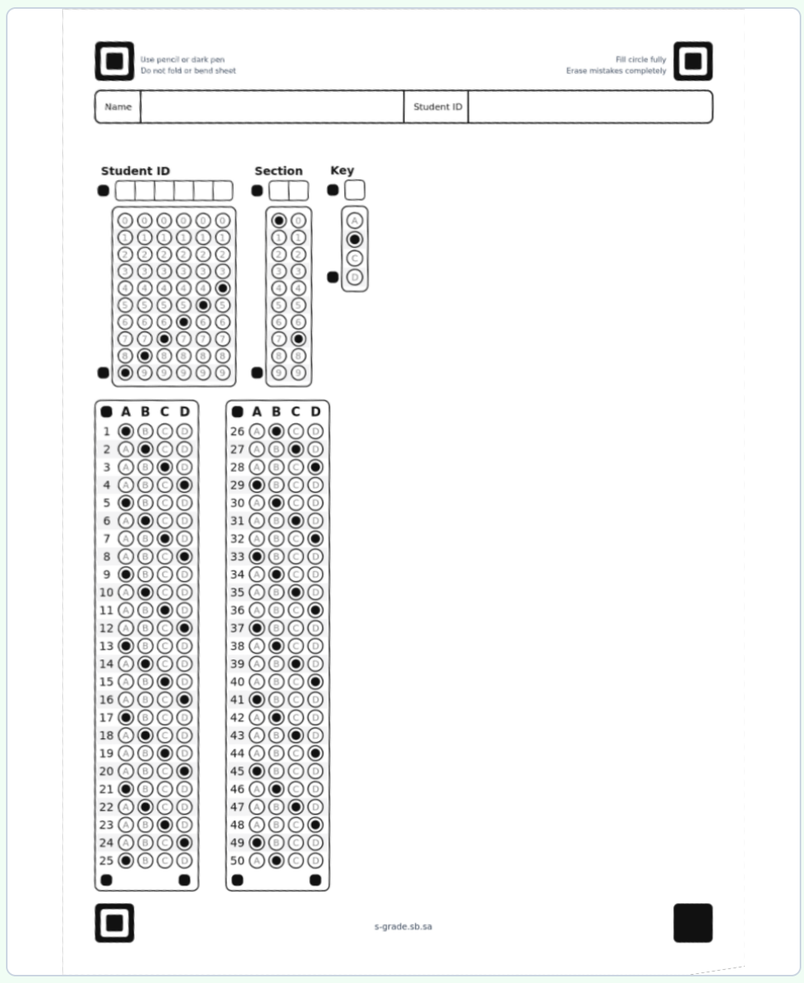
result.json

50q · strong perspective PASS

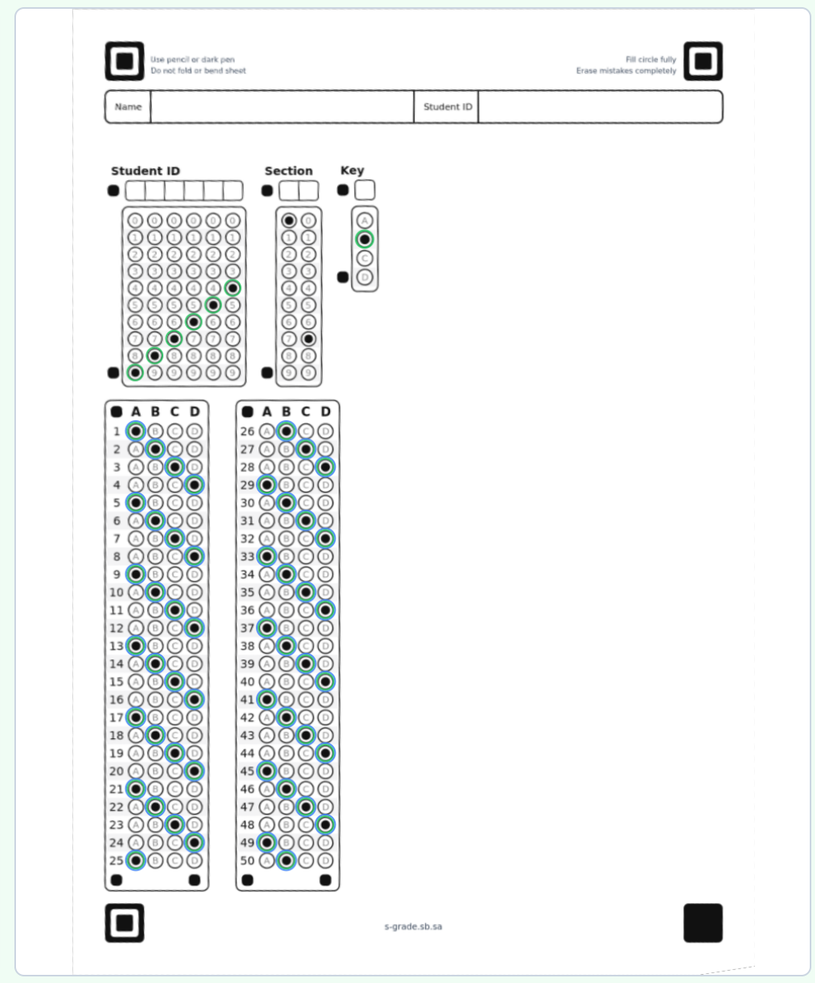
profile: `perspective_strong` · 574 passed · 0 failed



INPUT



WARPED



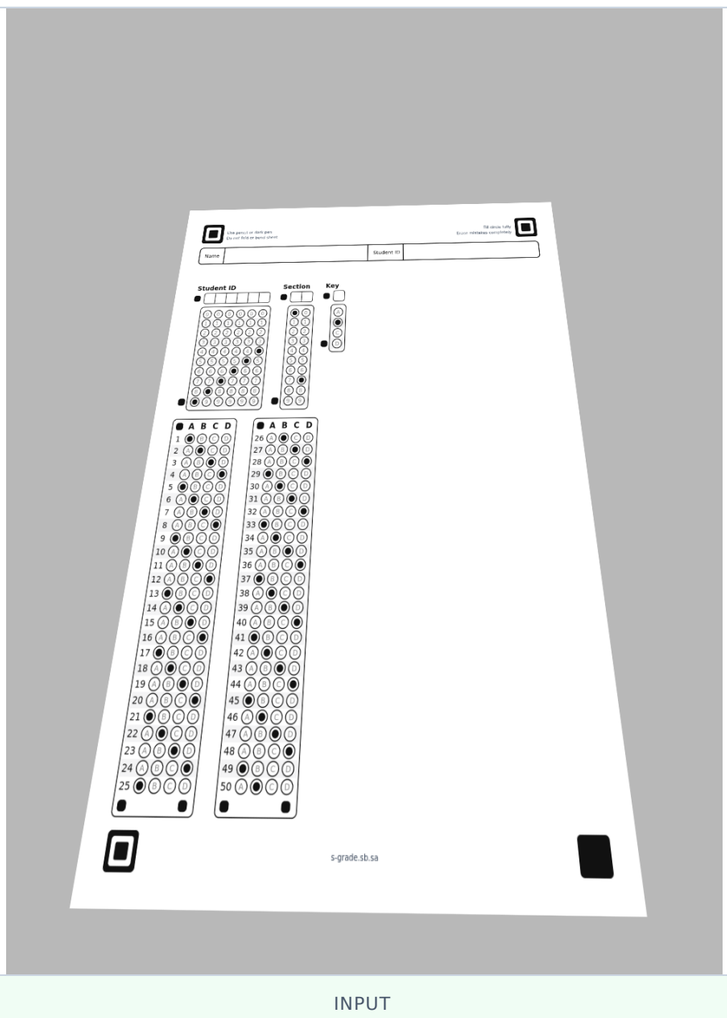
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

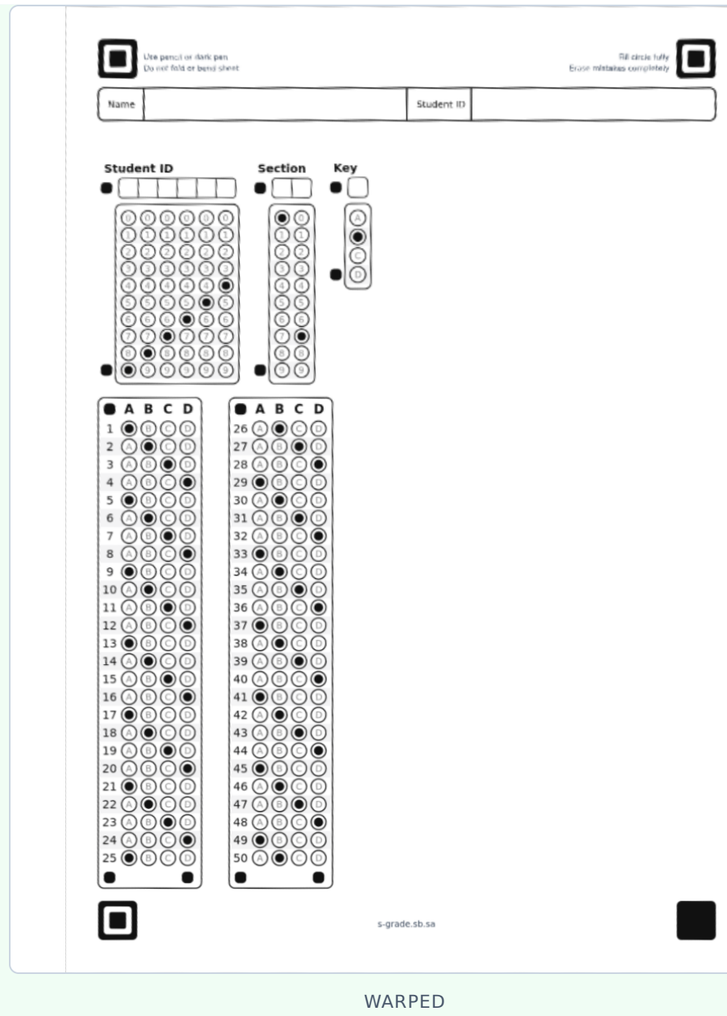
result.json

50q · steep keystone (phone low angle) PASS

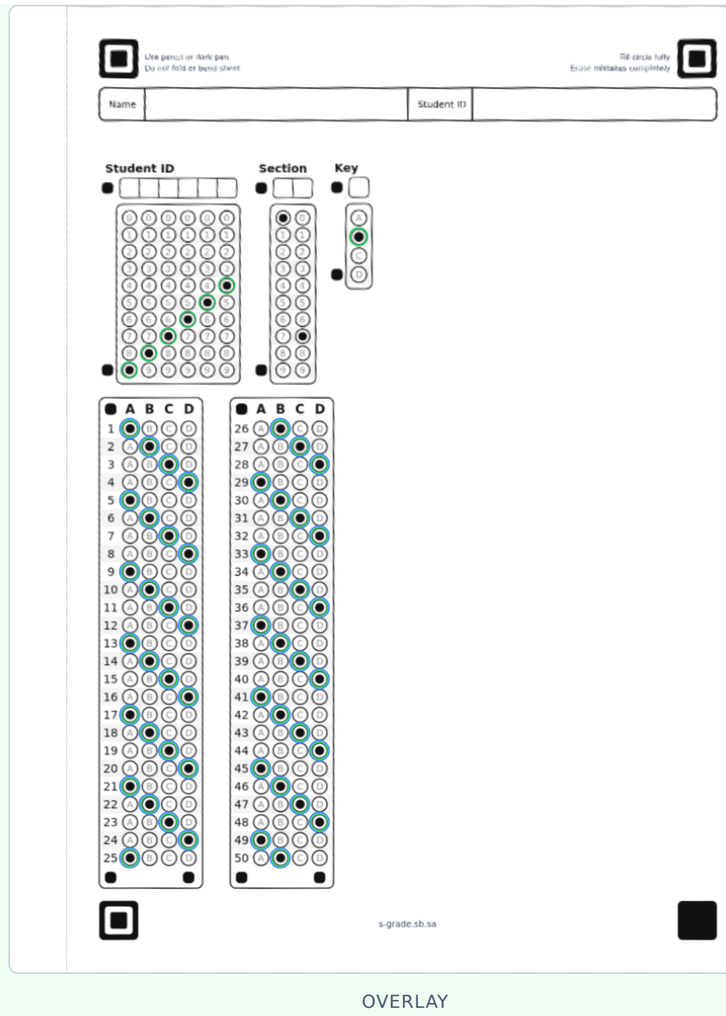
profile: `perspective_steep` · 574 passed · 0 failed



INPUT



WARPED



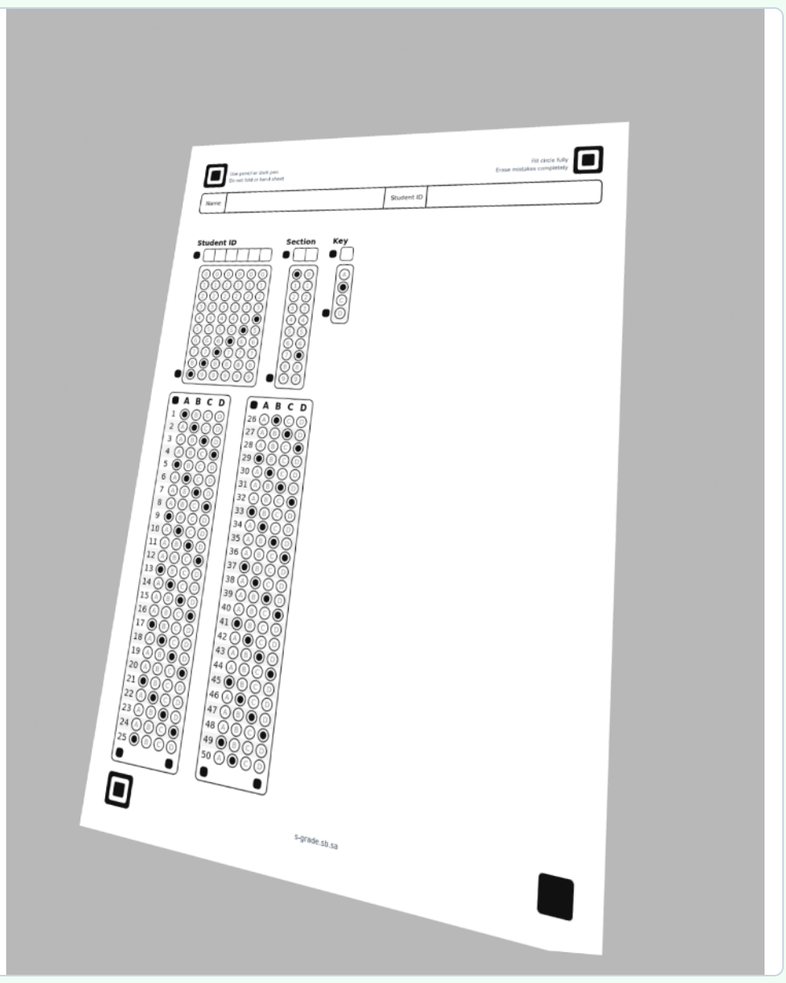
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

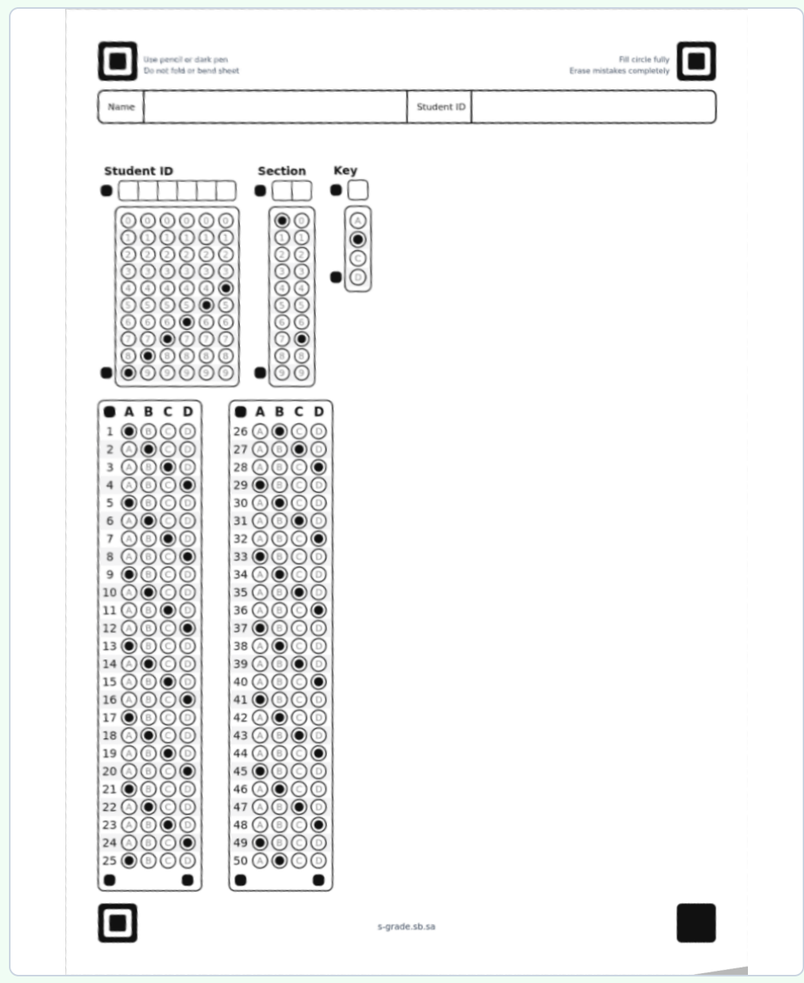
result.json

50q · combined tilt + rot PASS

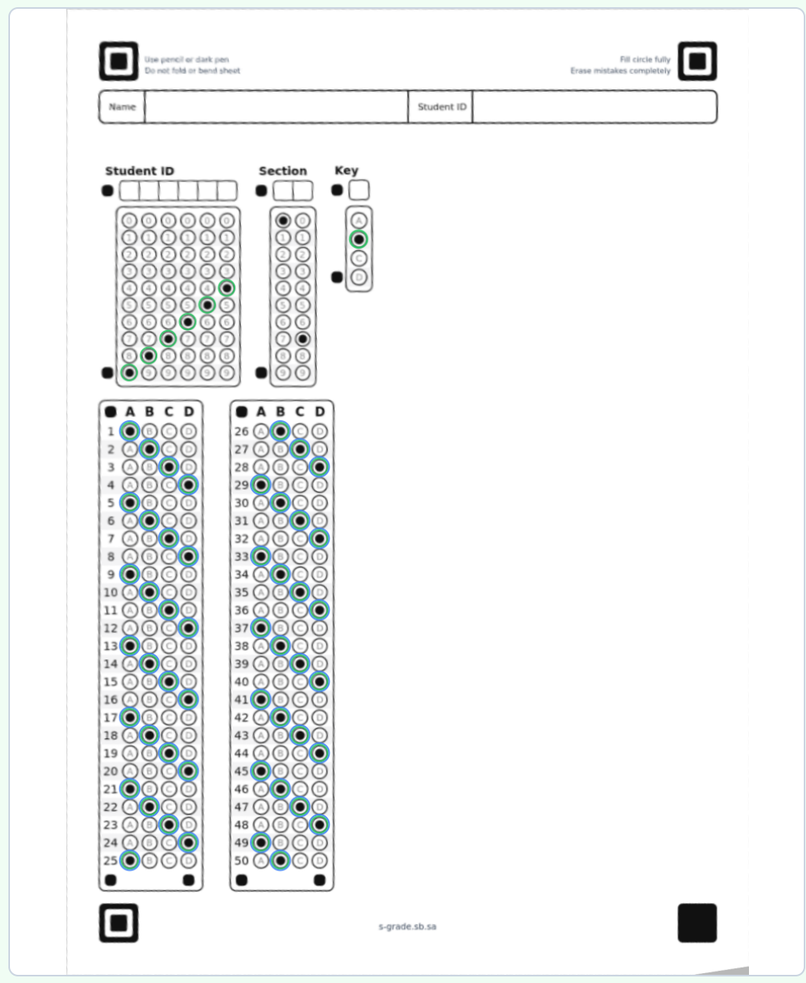
profile: `tilt_combined` · 574 passed · 0 failed



INPUT



WARPED



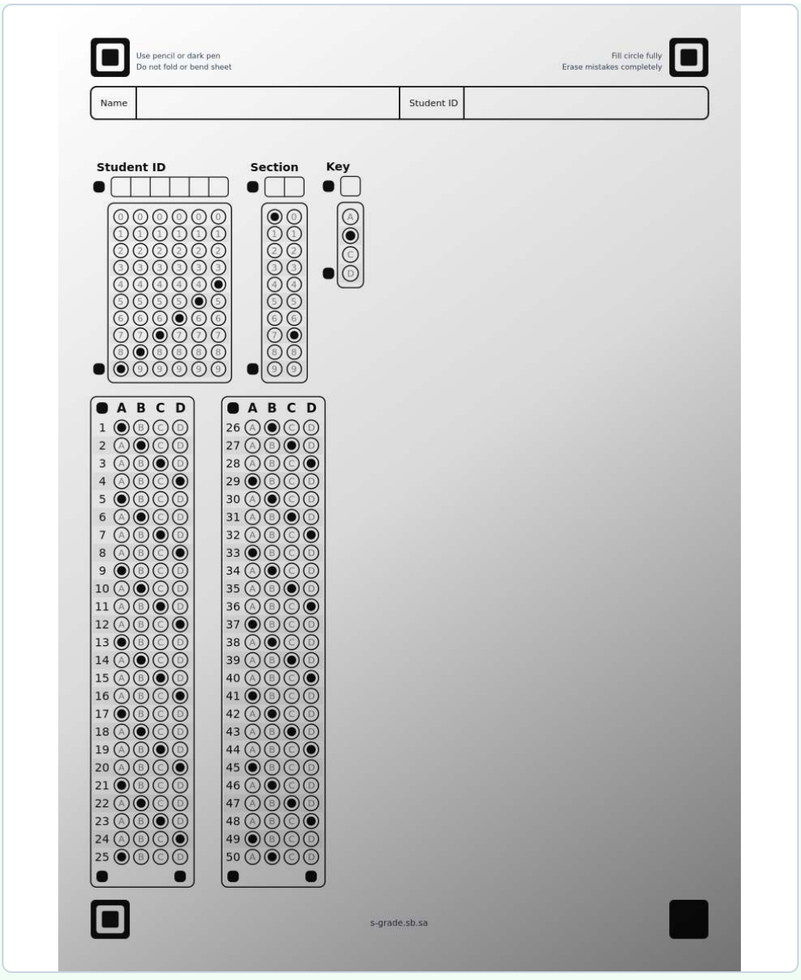
OVERLAY

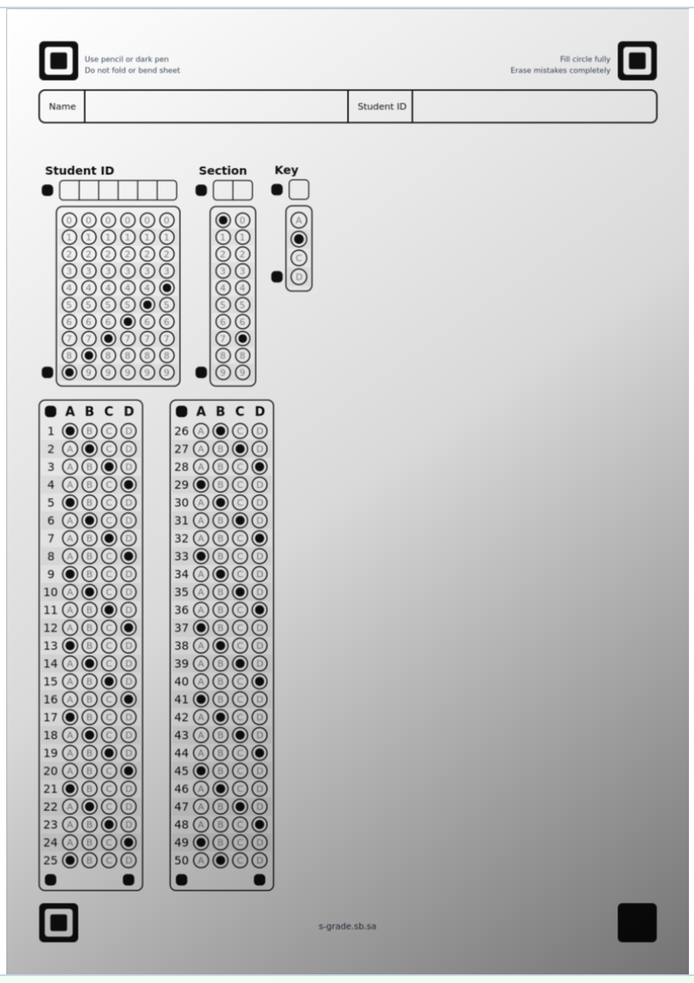
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

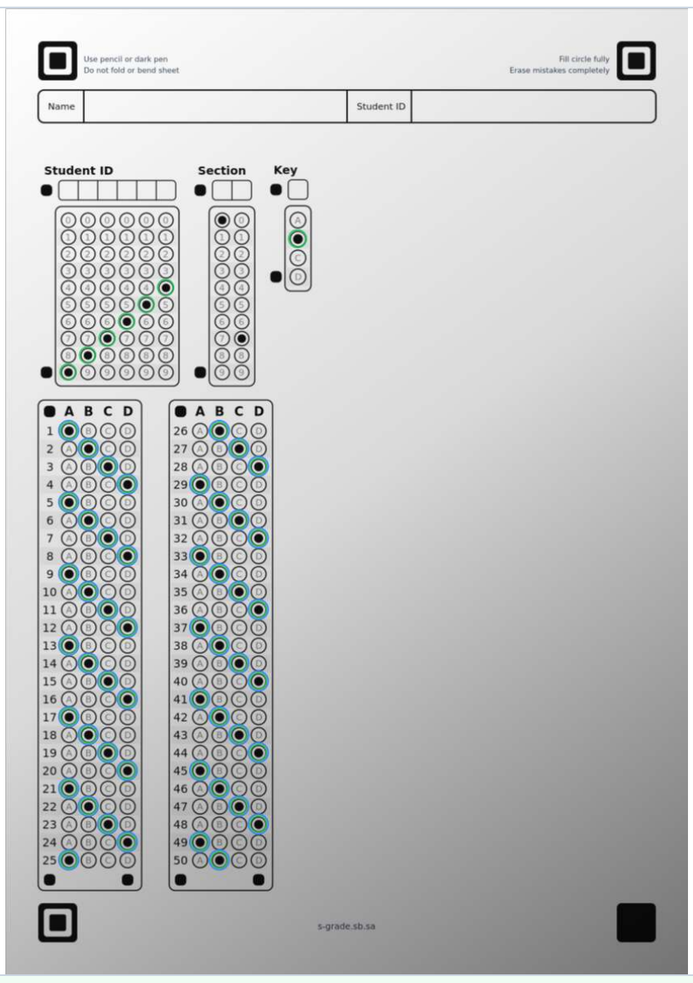
result.json

50q · lighting gradient PASS

profile: `lighting_gradient` · 574 passed · 0 failed







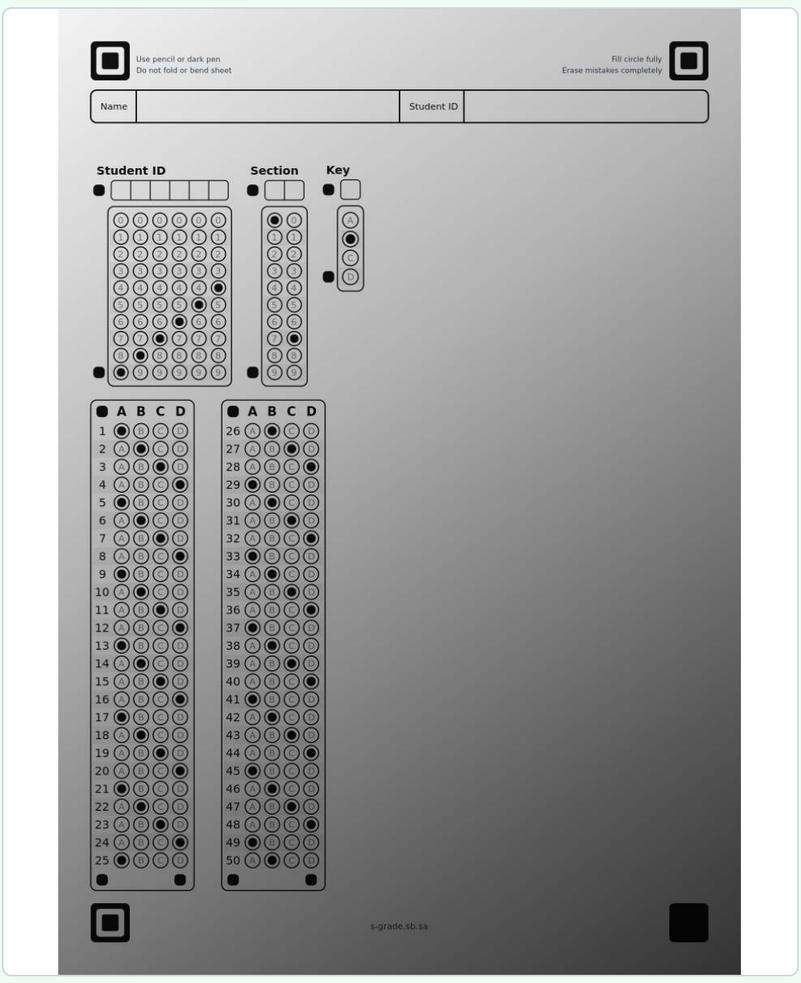
INPUT WARPED OVERLAY

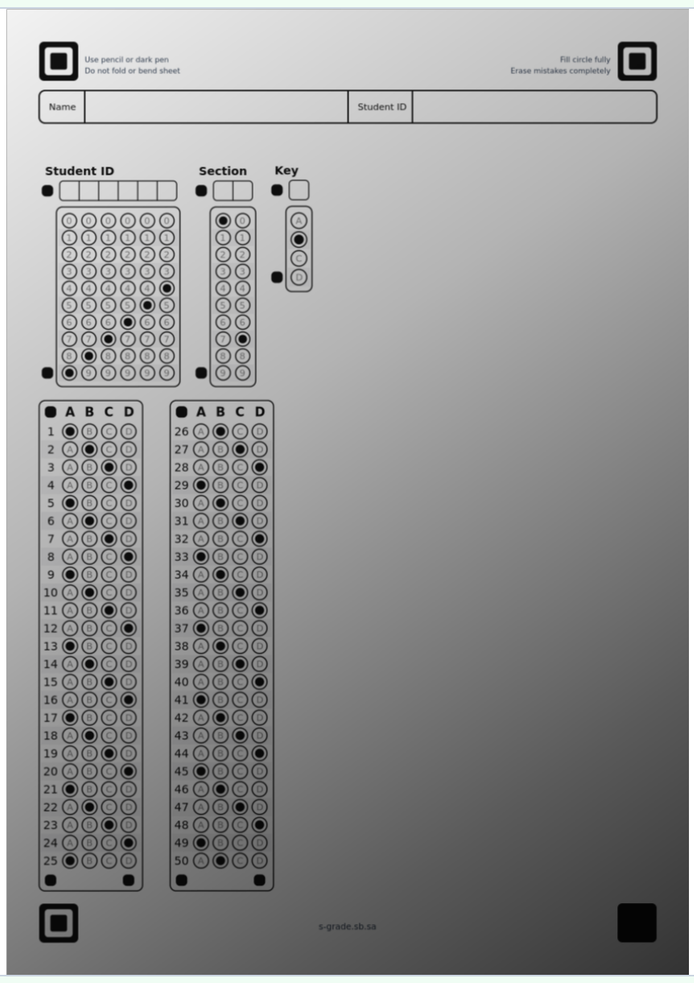
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

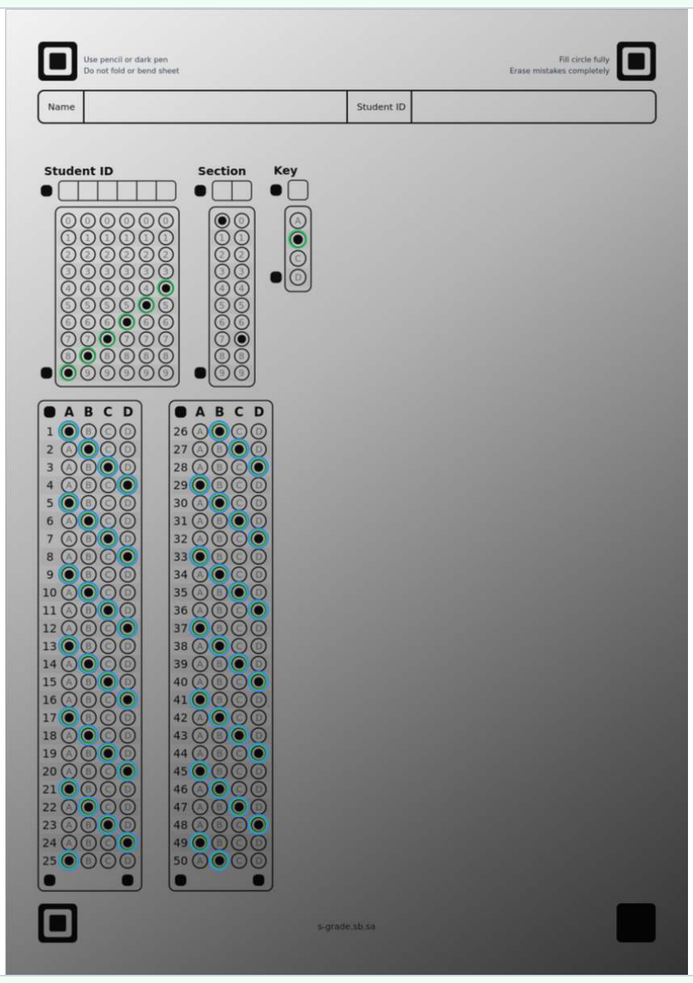
result.json

50q · lighting HEAVY gradient PASS

profile: `lighting_heavy_gradient` · 574 passed · 0 failed







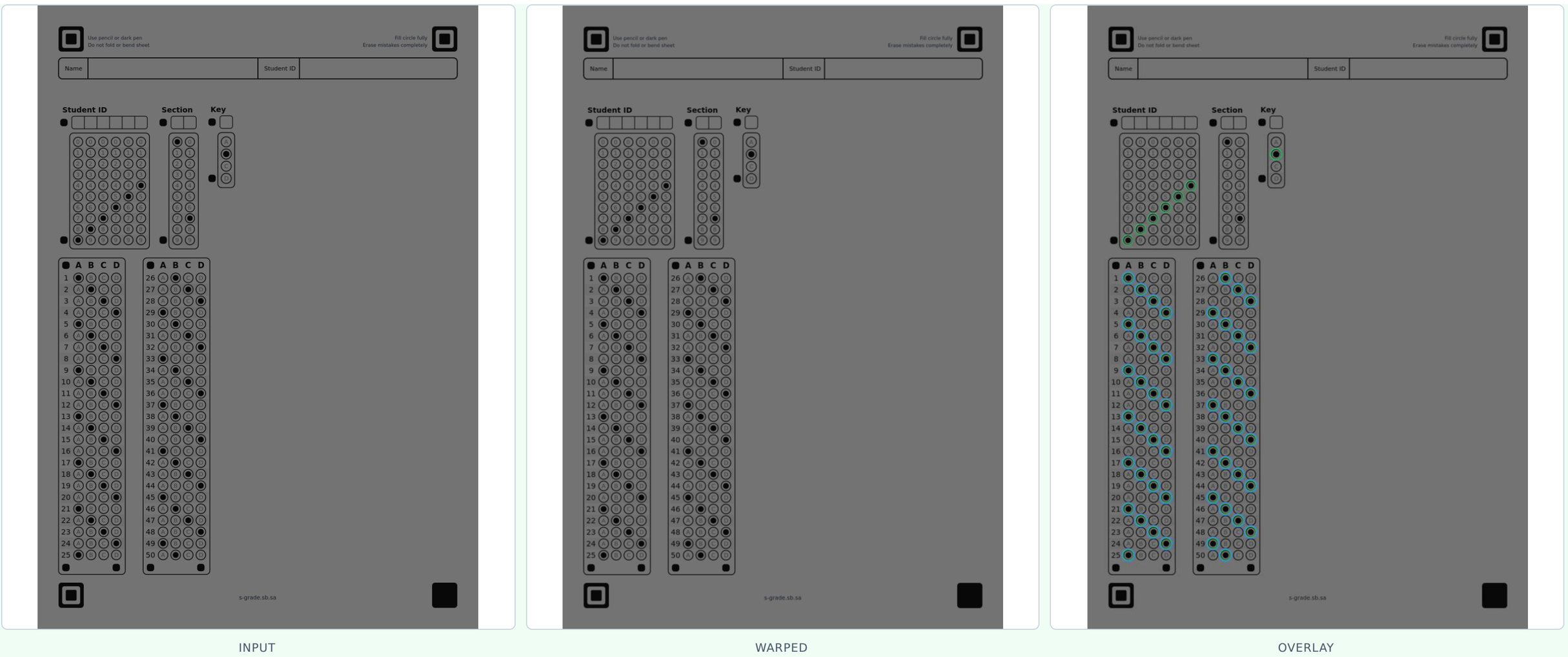
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · lighting global dark PASS

profile: `lighting_global_dark` · 574 passed · 0 failed



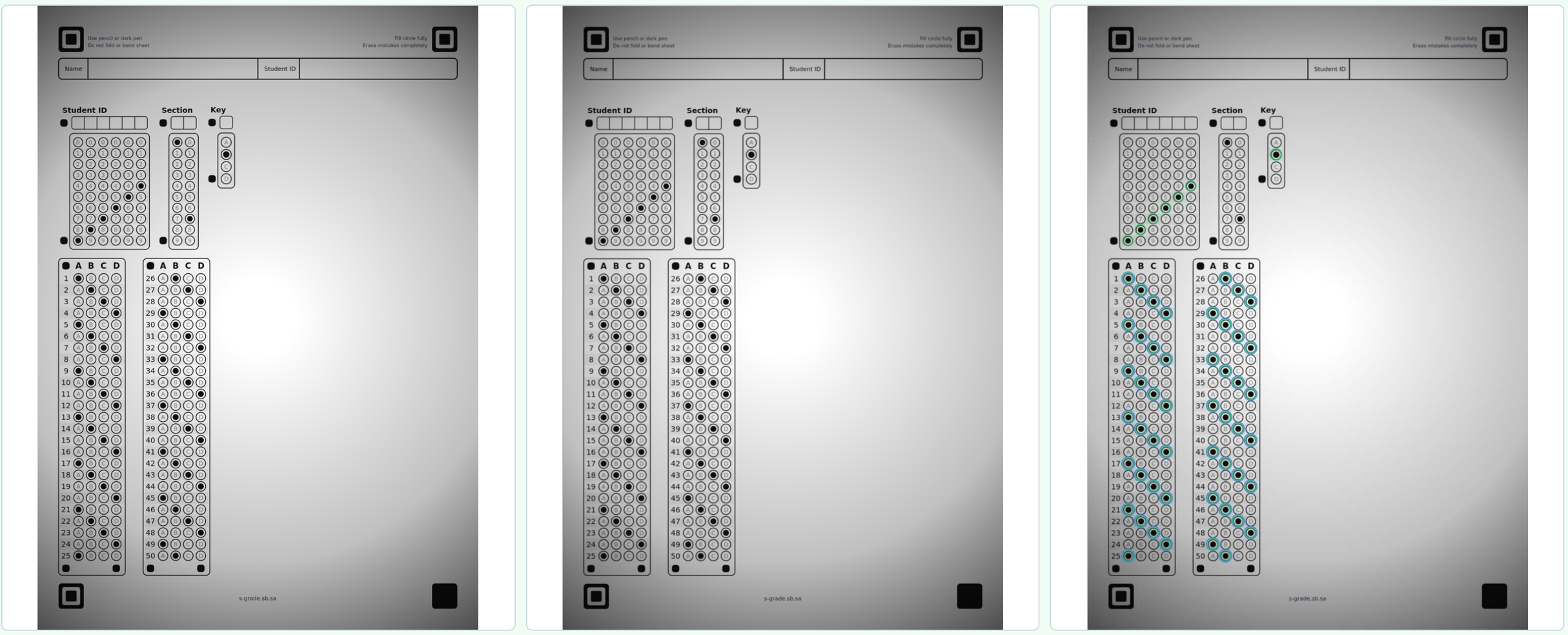
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · lighting vignette PASS

profile: `lighting_vignette` · 574 passed · 0 failed



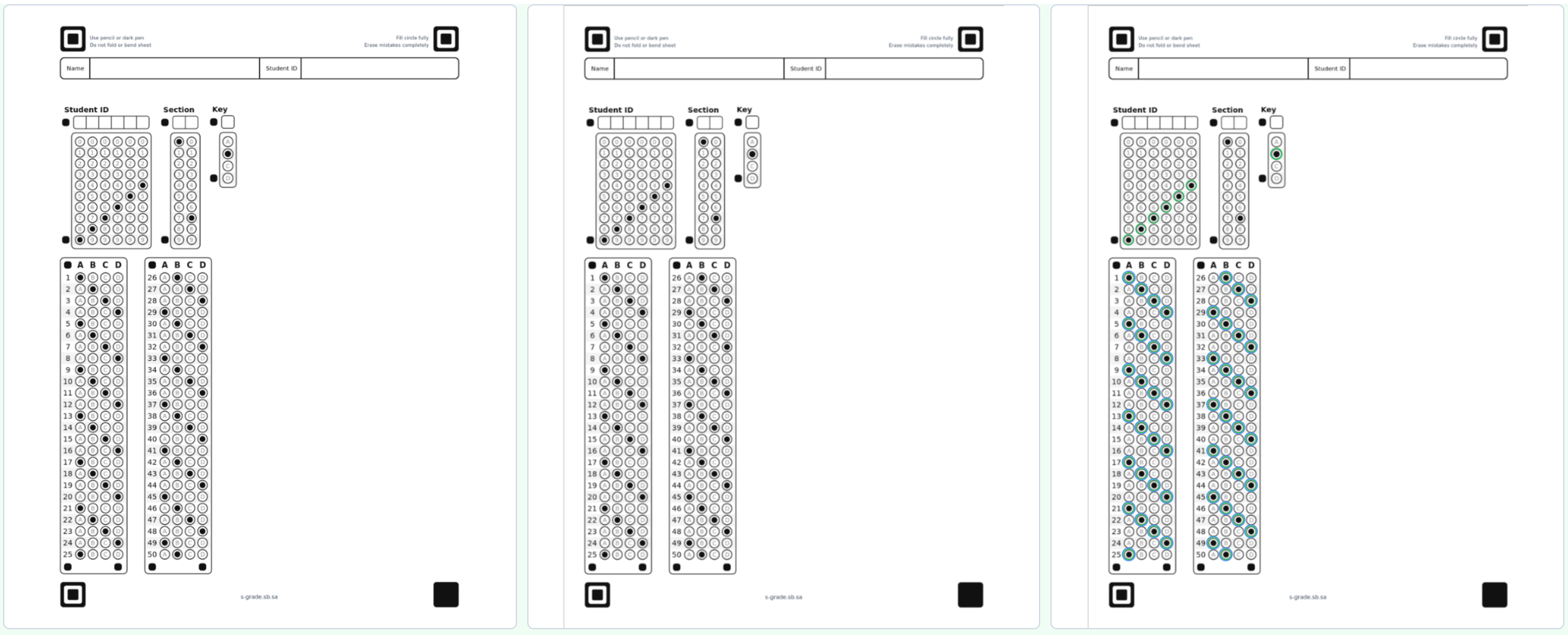
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · low res (700px) PASS

profile: `low_res` · 574 passed · 0 failed



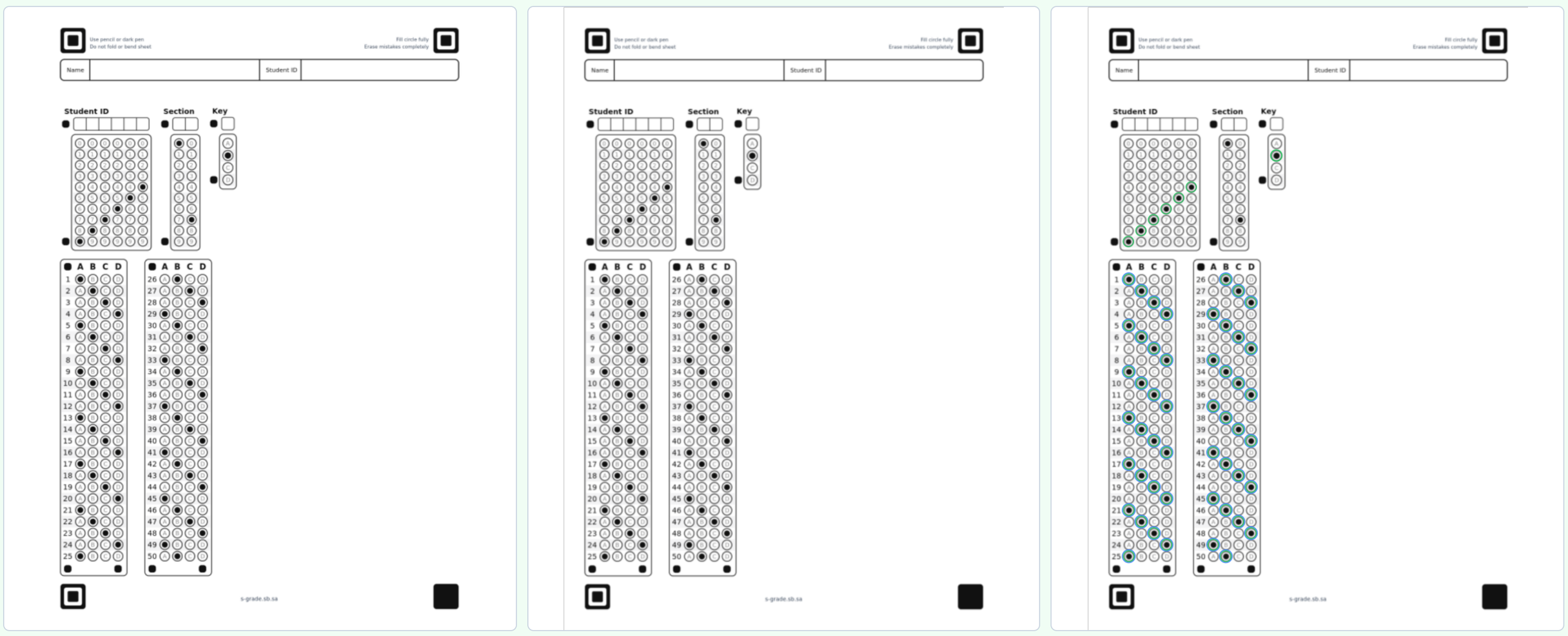
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · very low res (520px) PASS

profile: `very_low_res` · 574 passed · 0 failed



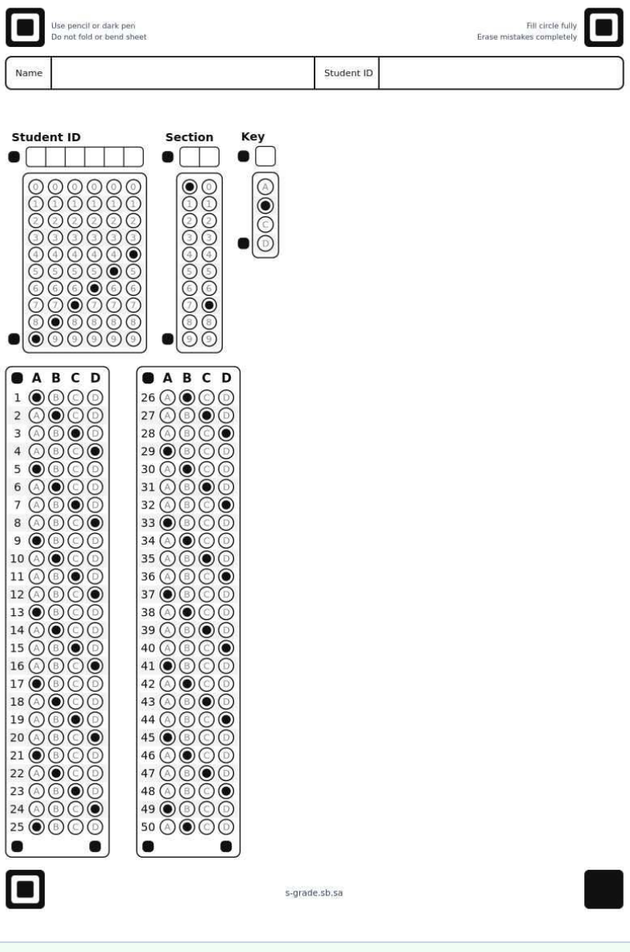
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

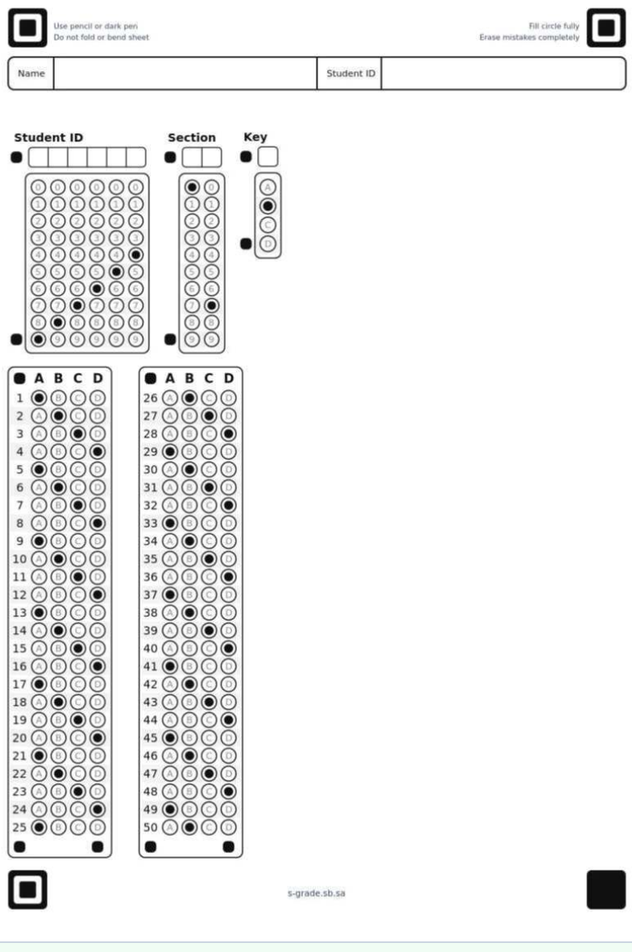
result.json

50q · jpeg q50 PASS

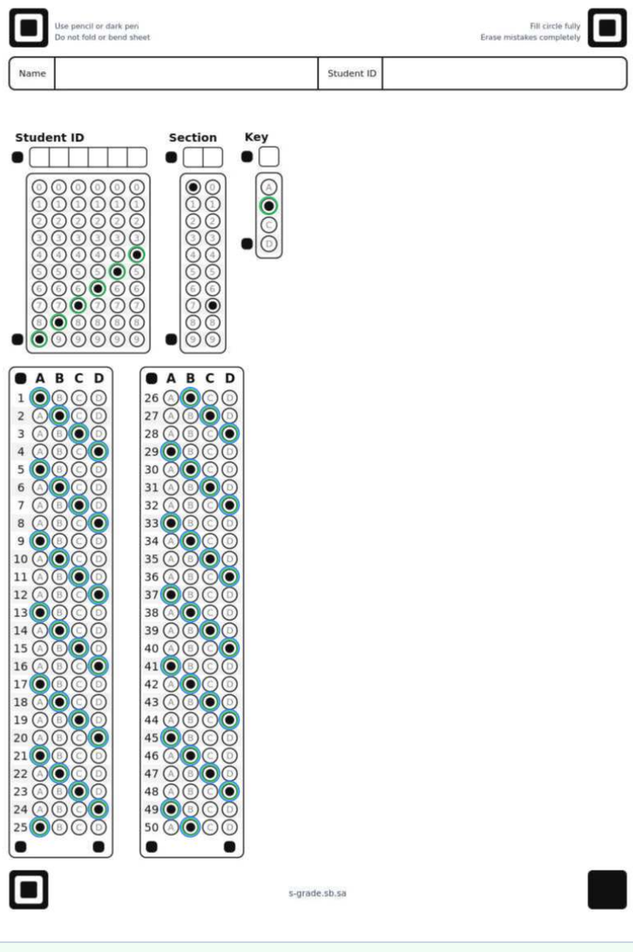
profile: `jpeg_q50` · 574 passed · 0 failed



INPUT



WARPED



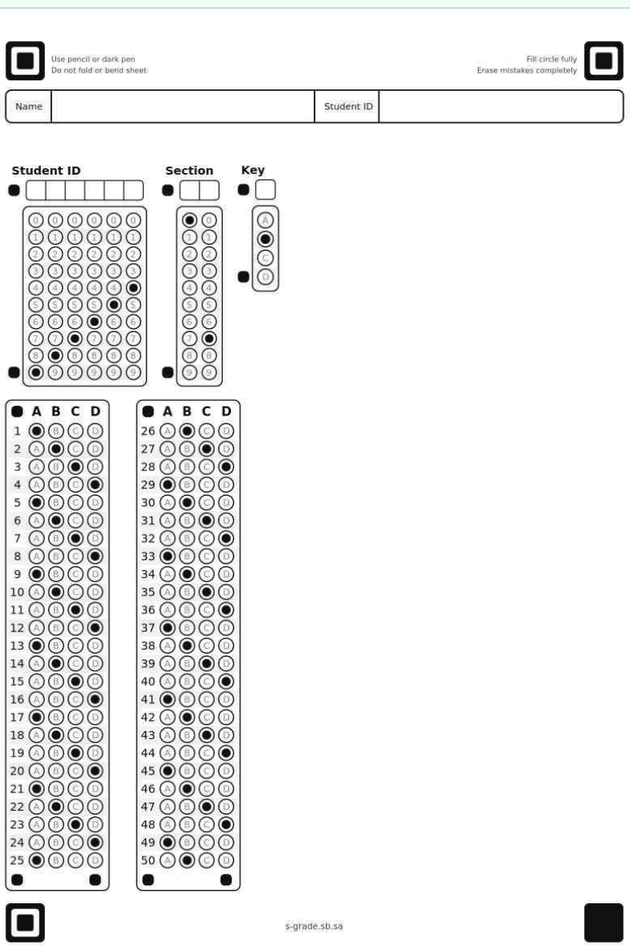
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

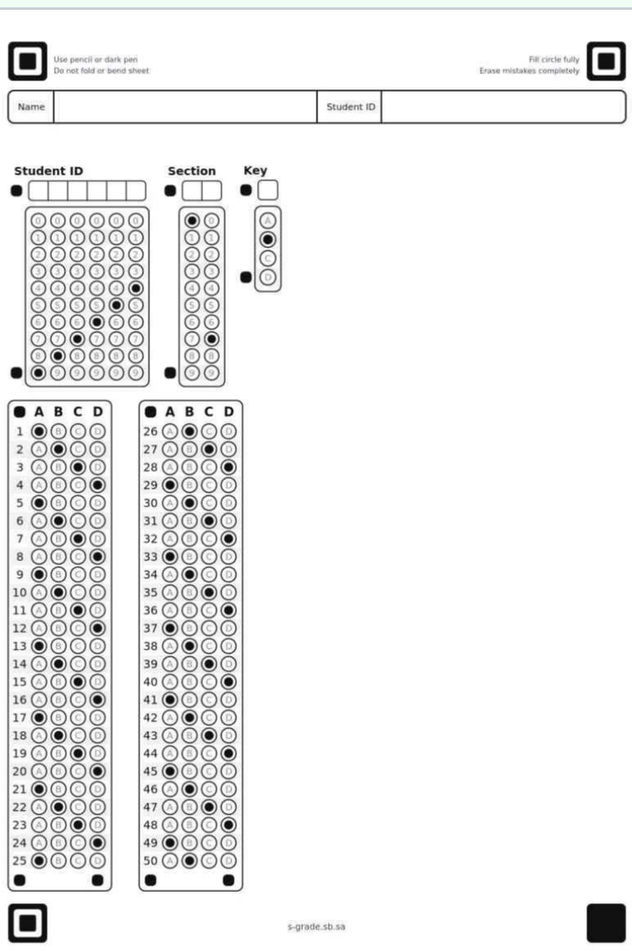
result.json

50q · jpeg q30 PASS

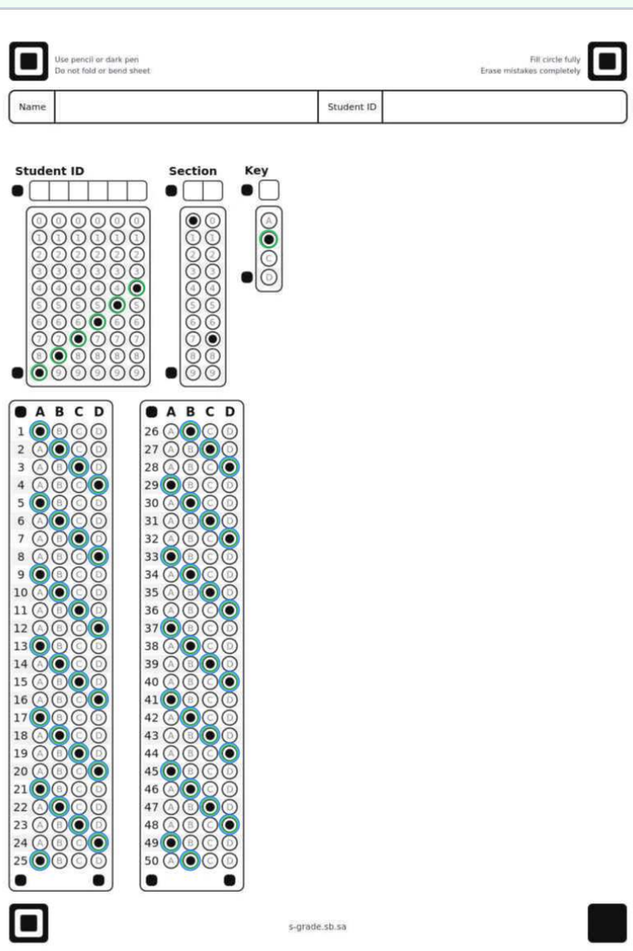
profile: `jpeg_q30` · 574 passed · 0 failed



INPUT



WARPED



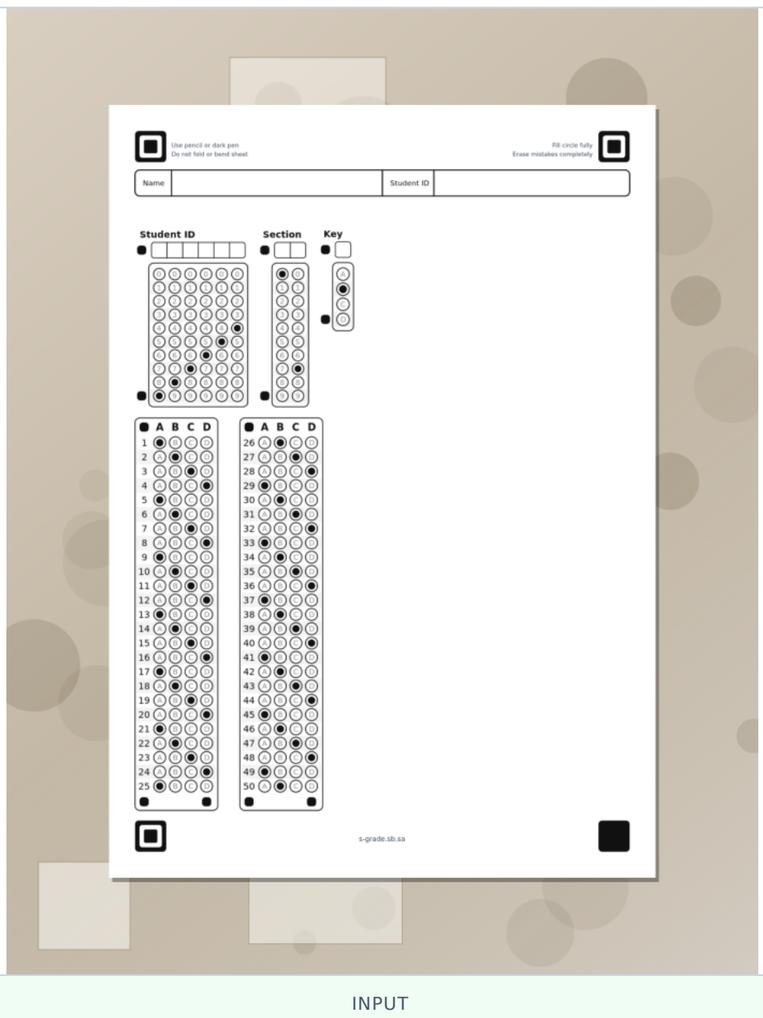
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

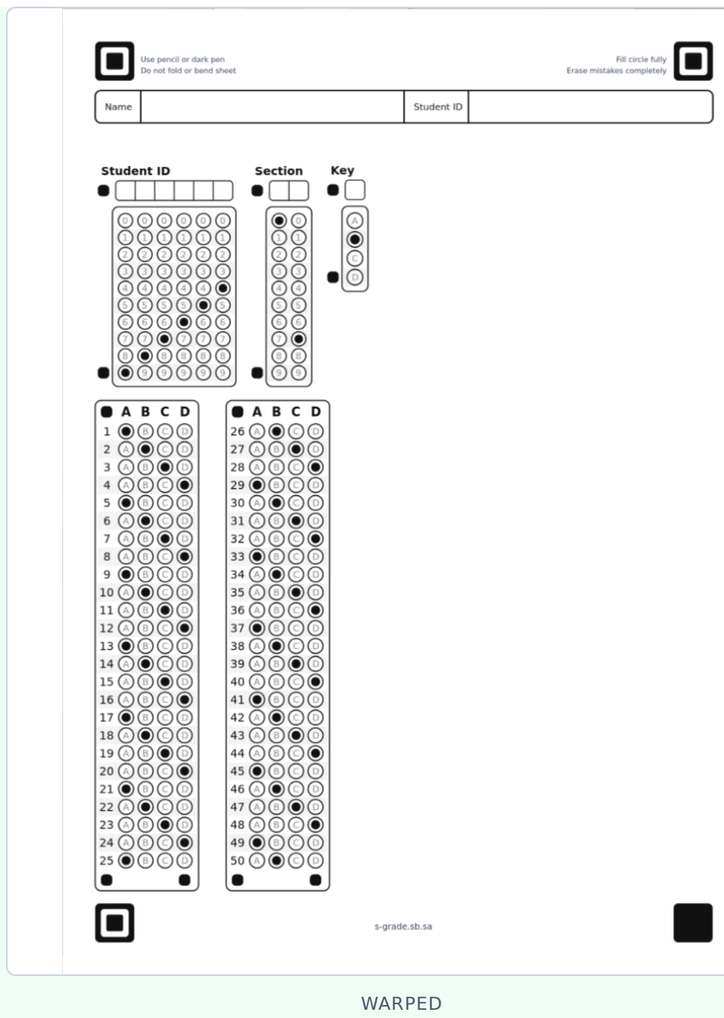
result.json

50q · scene centered PASS

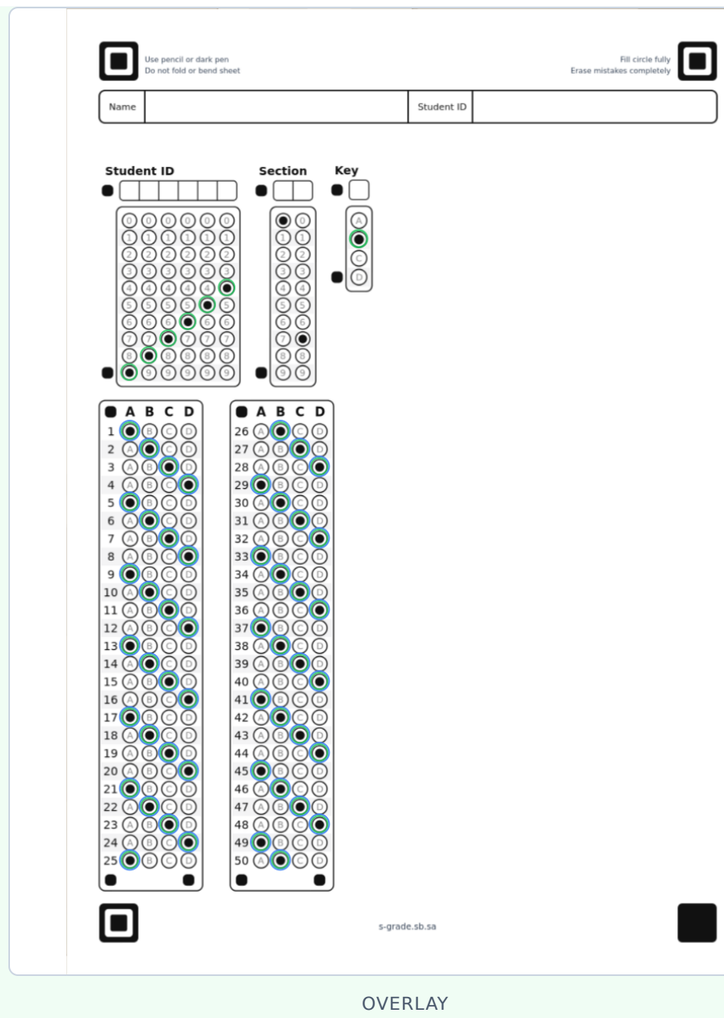
profile: `scene_center` · 574 passed · 0 failed



INPUT



WARPED



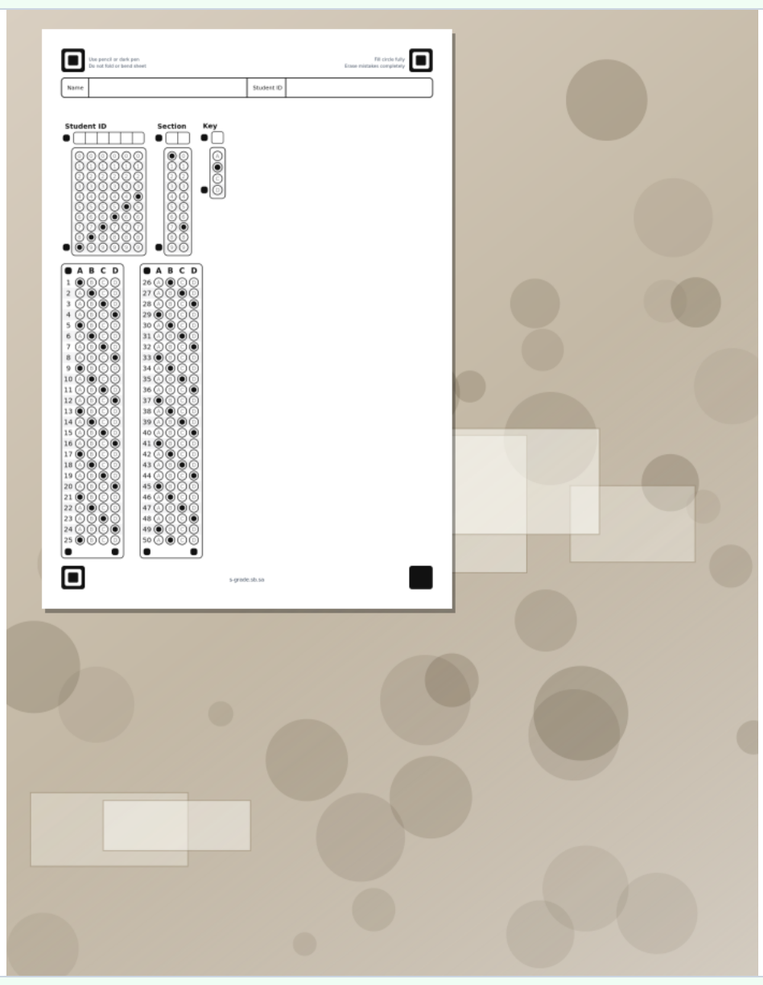
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

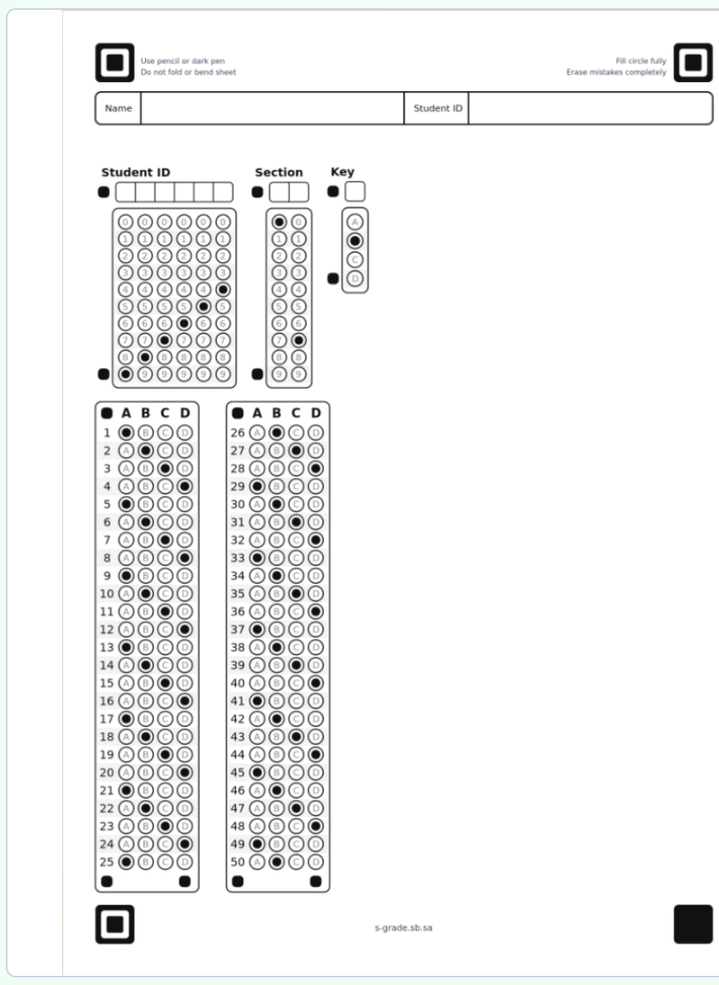
result.json

50q · scene top-left PASS

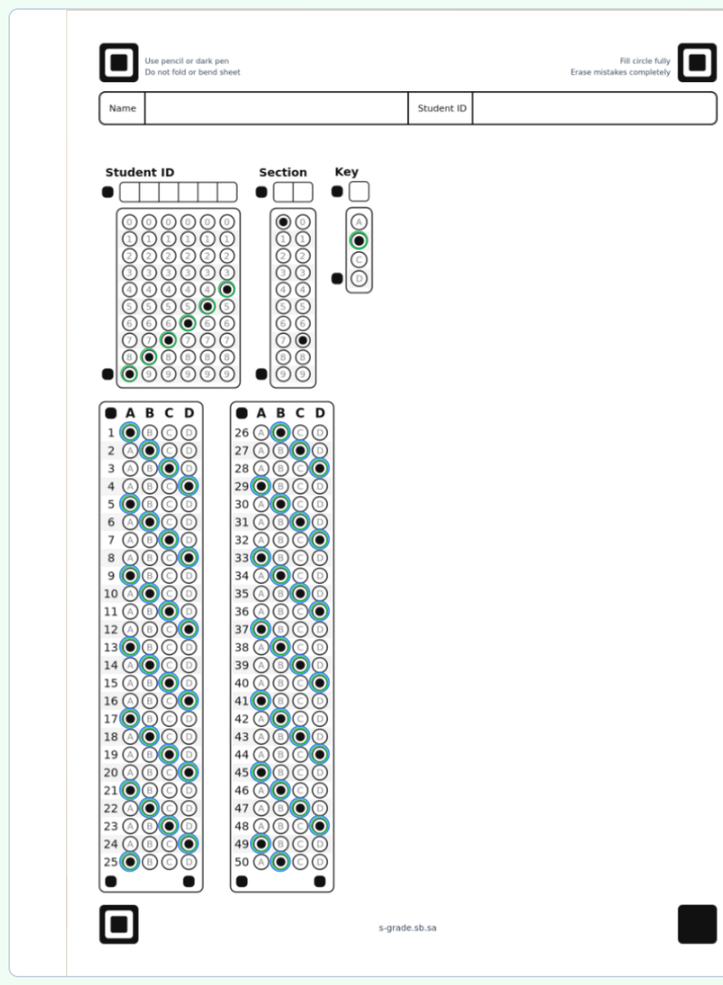
profile: `scene_top_left` · 574 passed · 0 failed



INPUT



WARPED



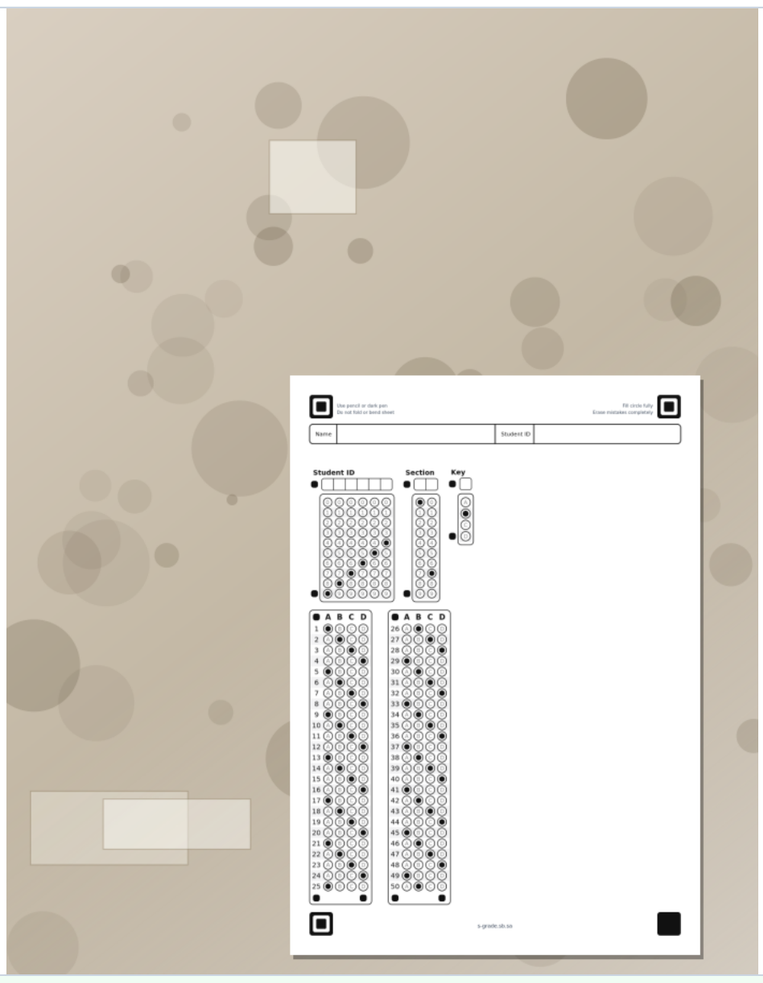
OVERLAY

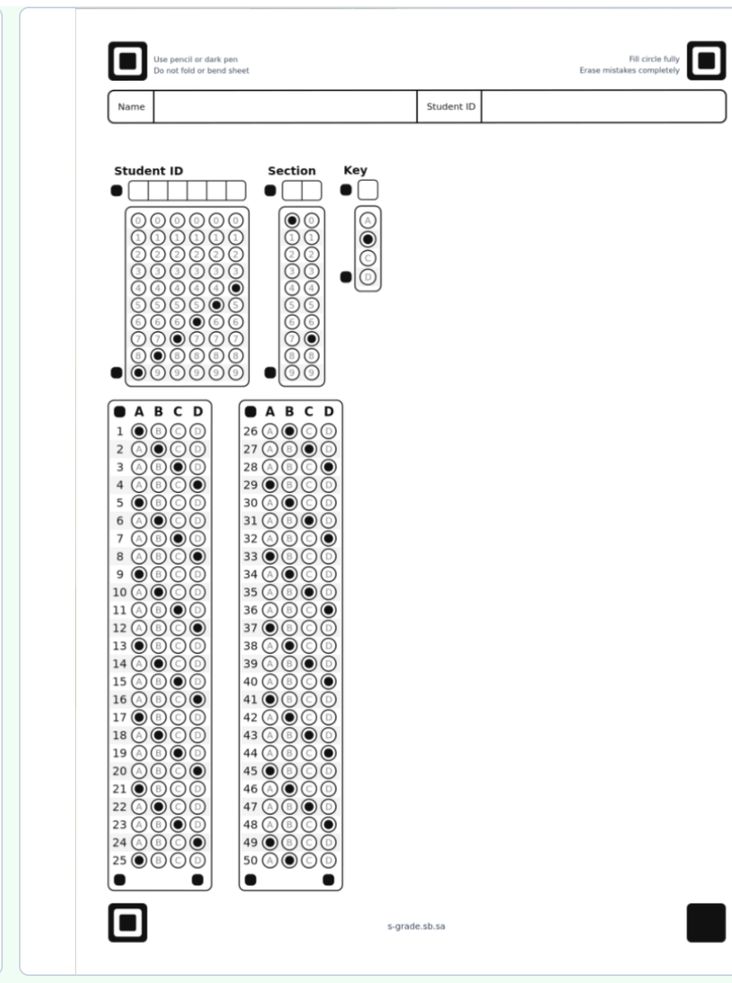
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

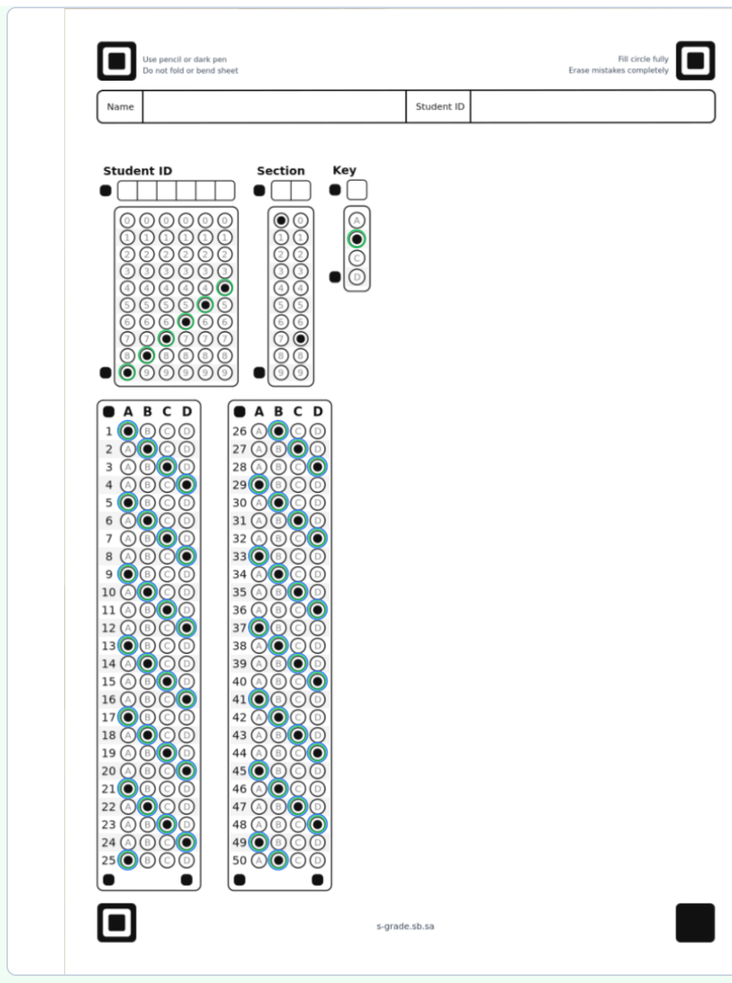
result.json

50q · scene bottom-right PASS

profile: `scene_bottom_right` · 574 passed · 0 failed







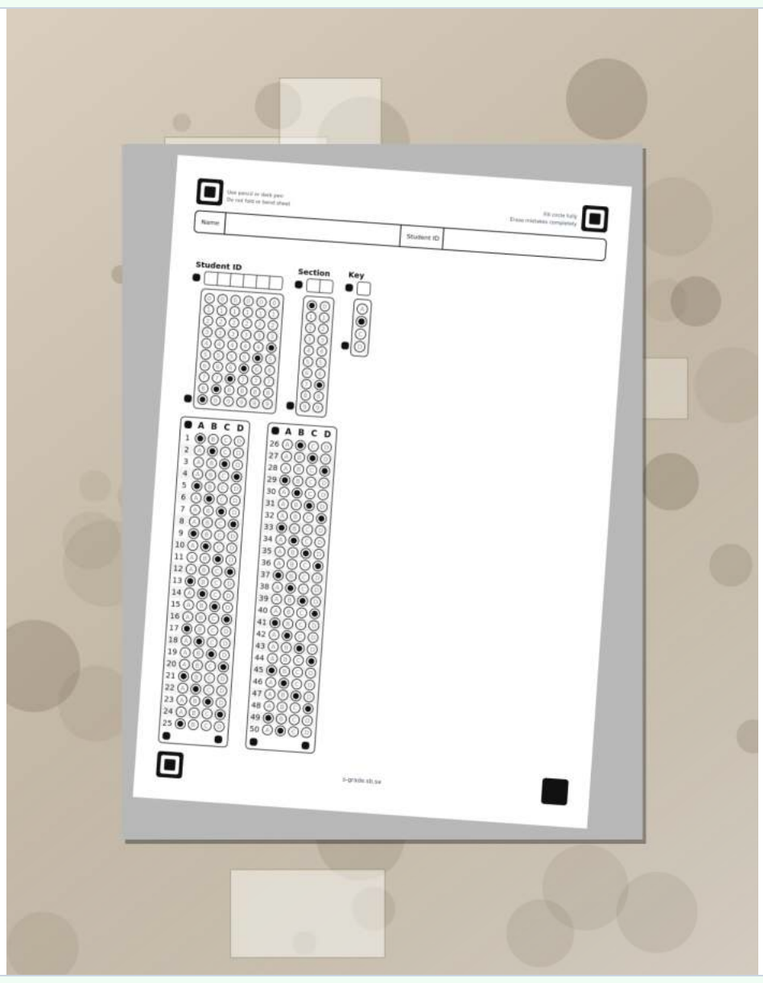
INPUT | WARPED | OVERLAY

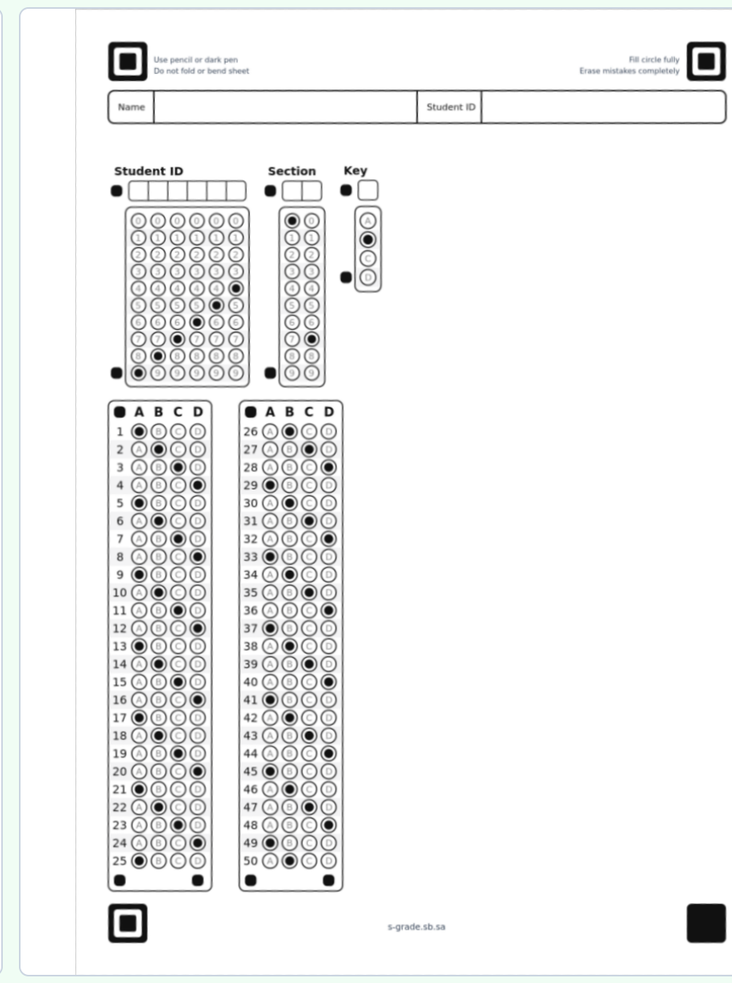
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

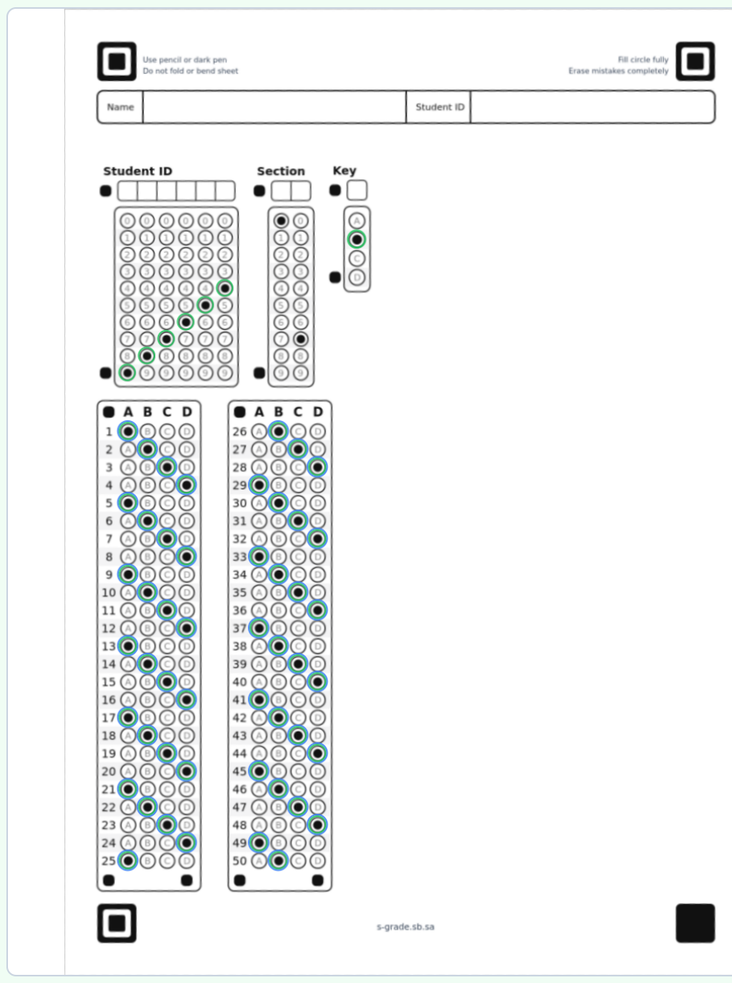
result.json

50q · scene rotated in frame PASS

profile: `scene_rotated` · 574 passed · 0 failed







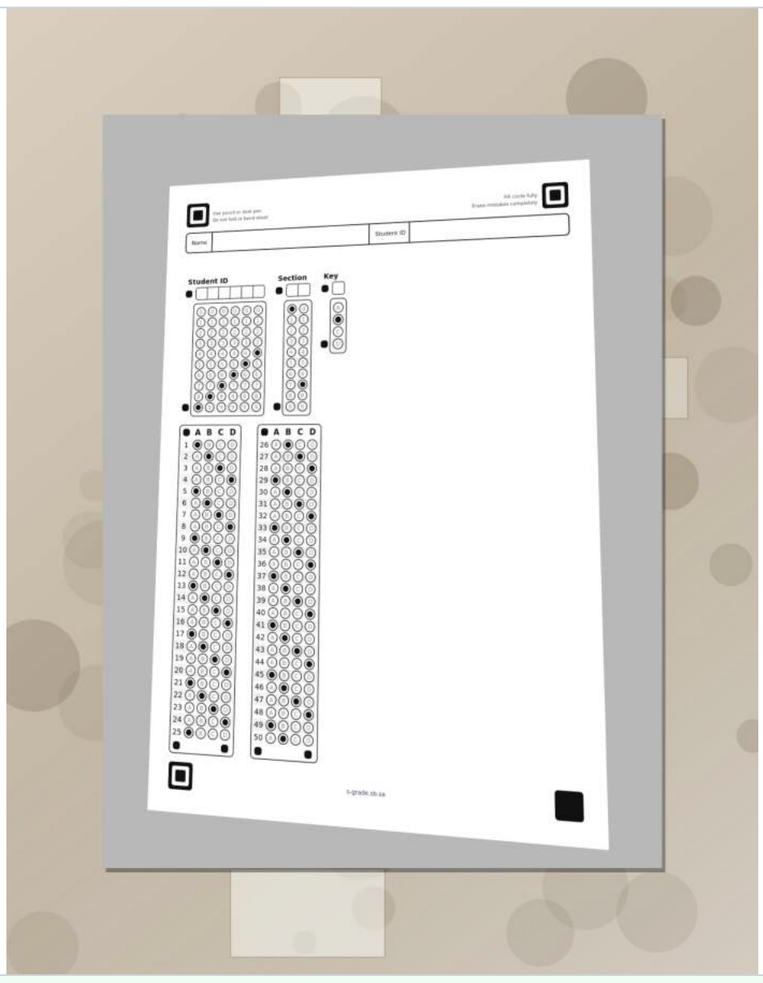
INPUT | WARPED | OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

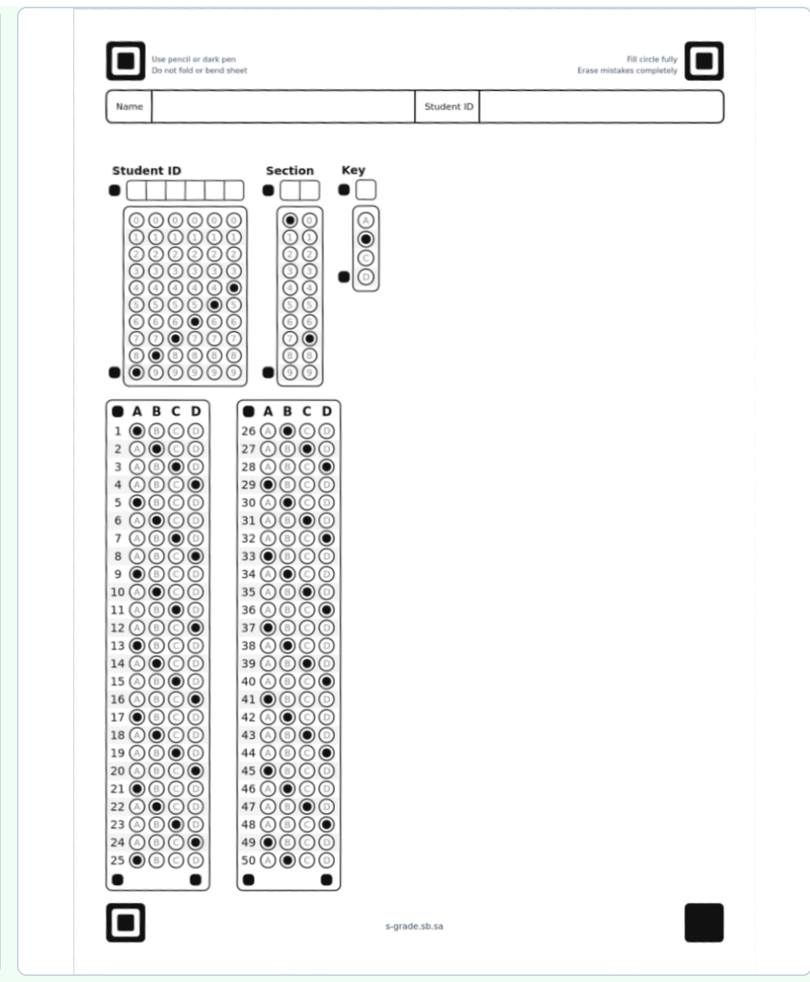
result.json

50q · scene perspective PASS

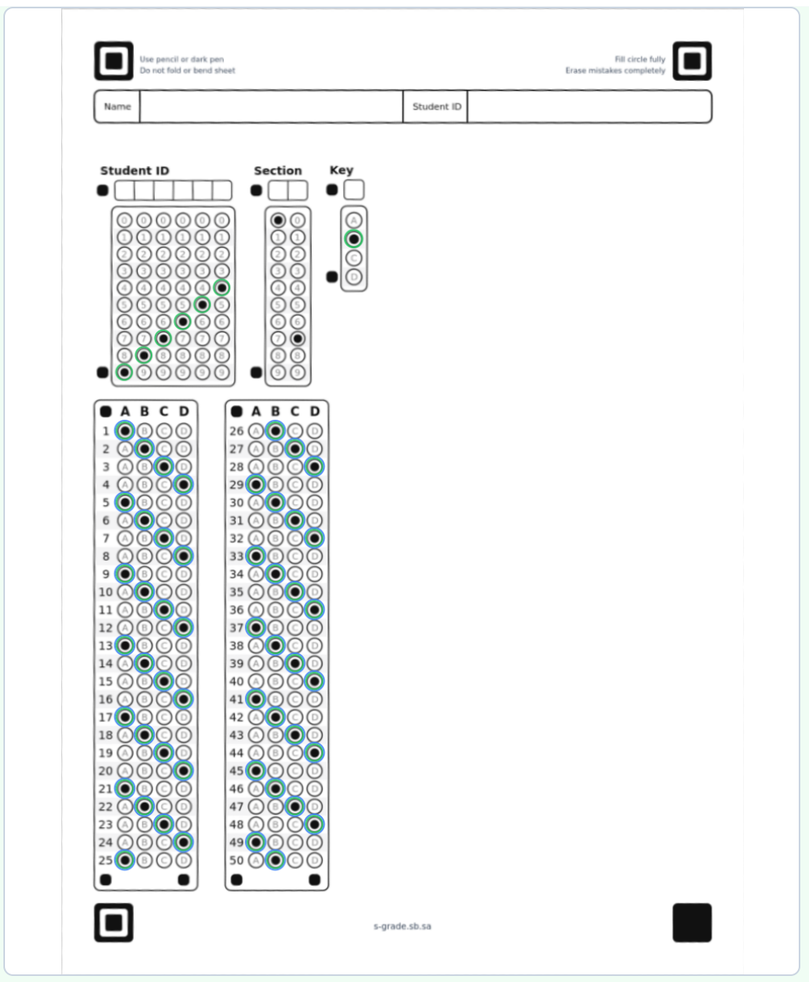
profile: `scene_perspective` · 574 passed · 0 failed



INPUT



WARPED



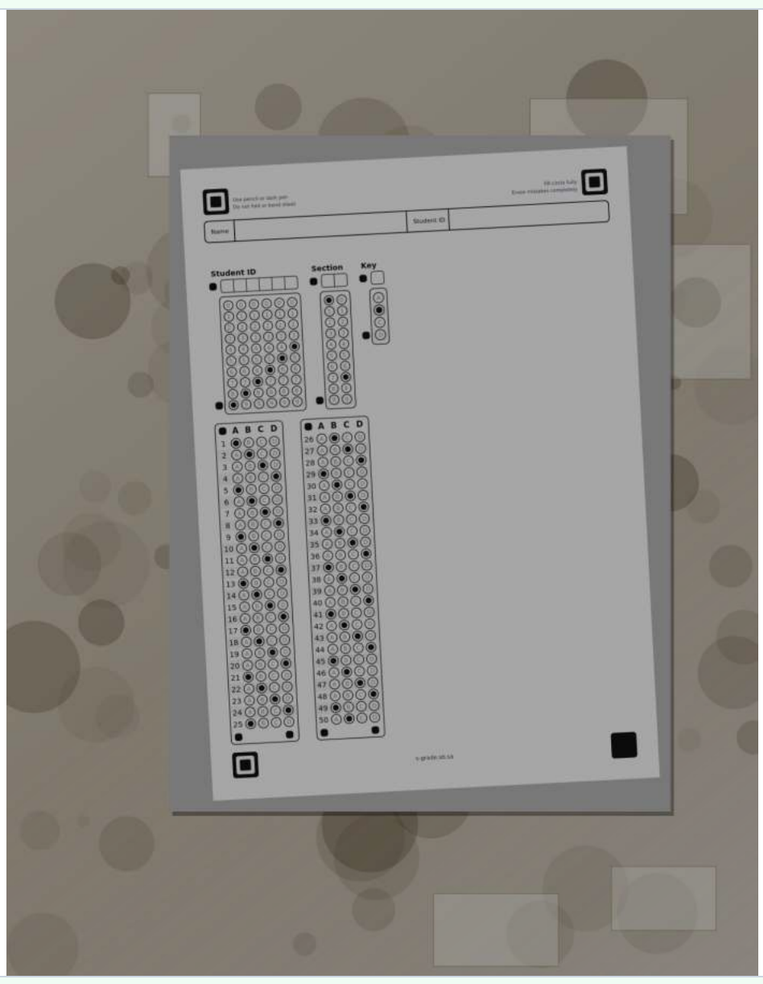
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

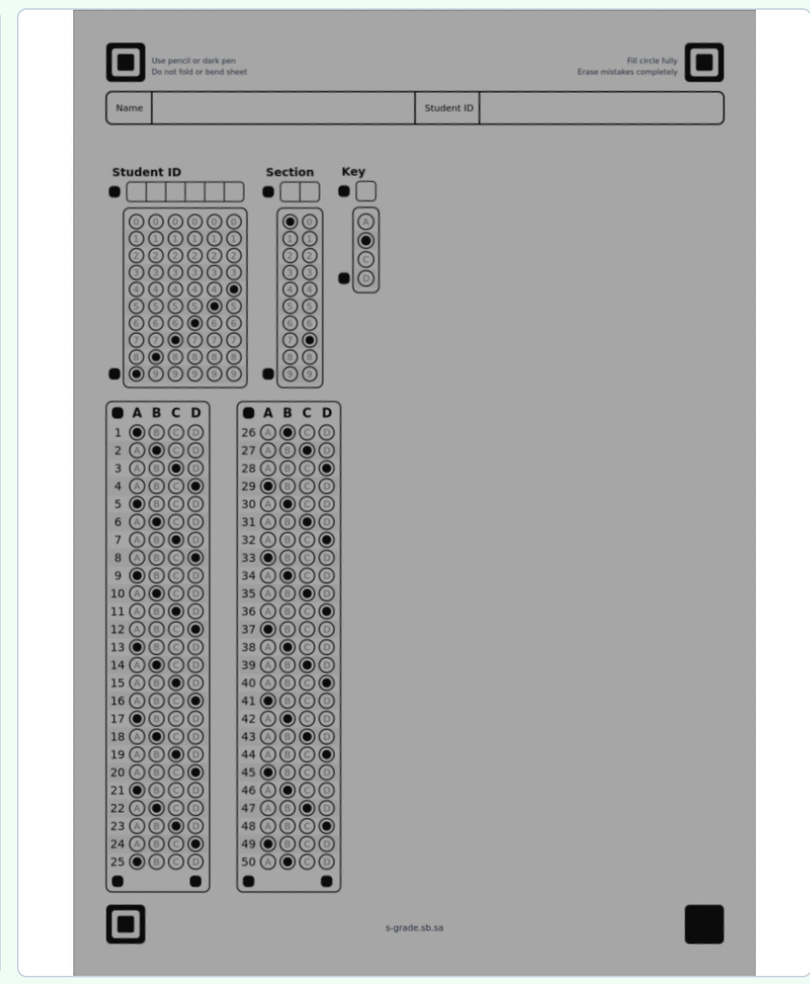
result.json

50q · scene cluttered dark PASS

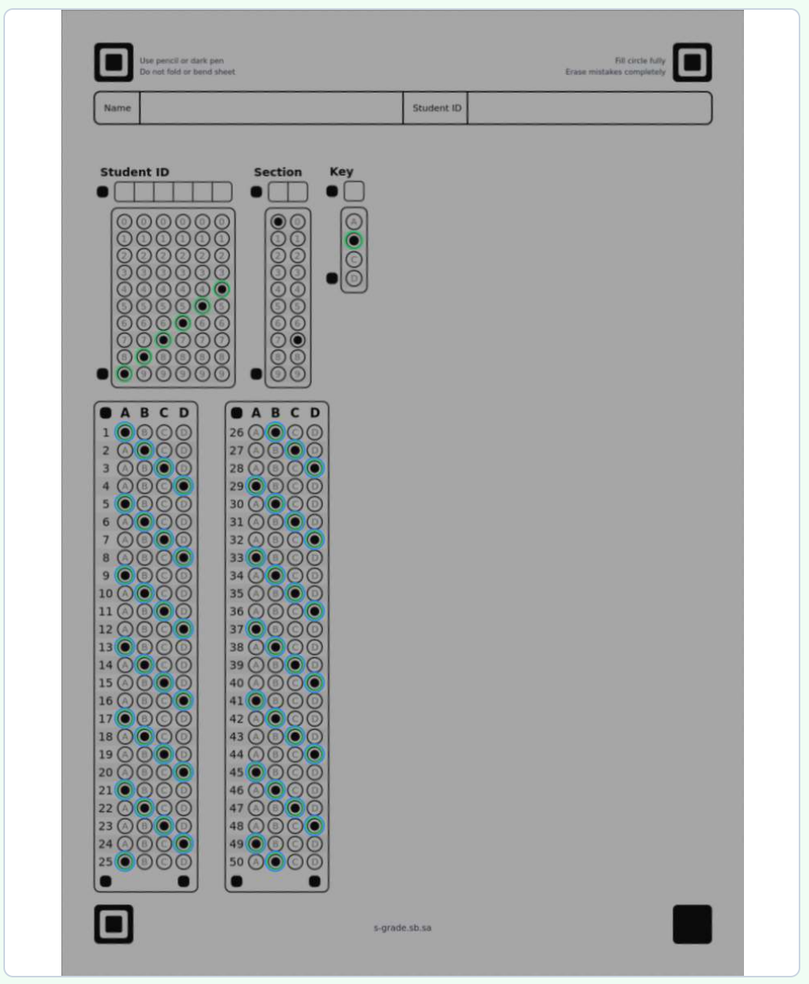
profile: `scene_cluttered_dark` · 574 passed · 0 failed



INPUT



WARPED



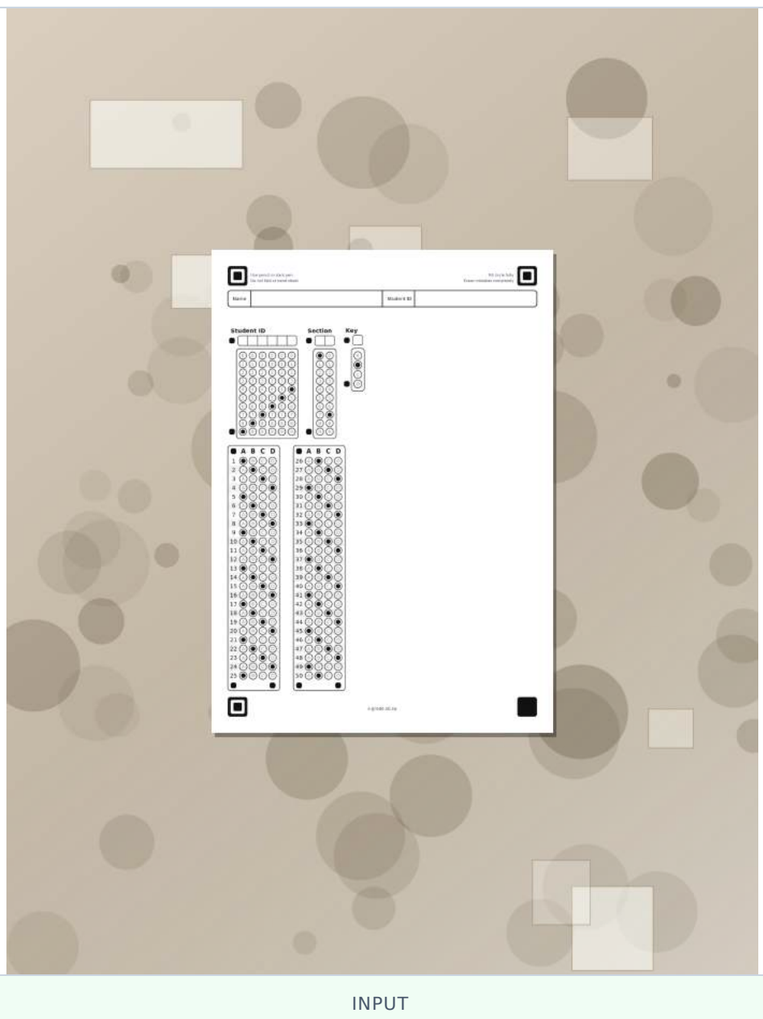
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

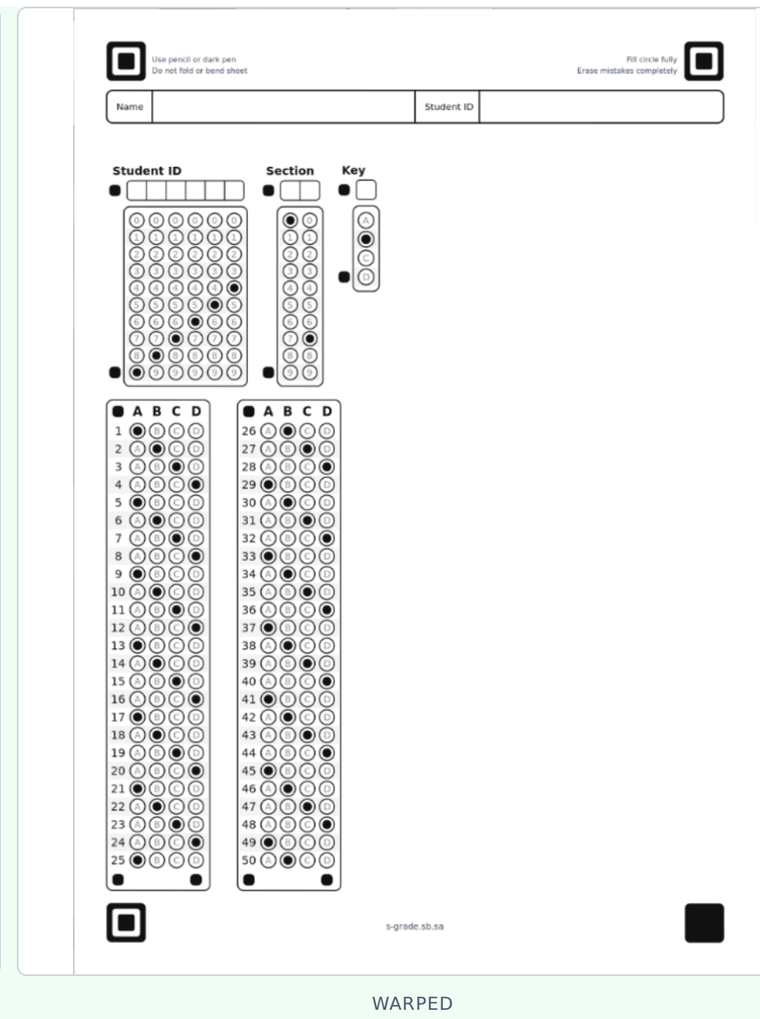
result.json

50q · scene small sheet PASS

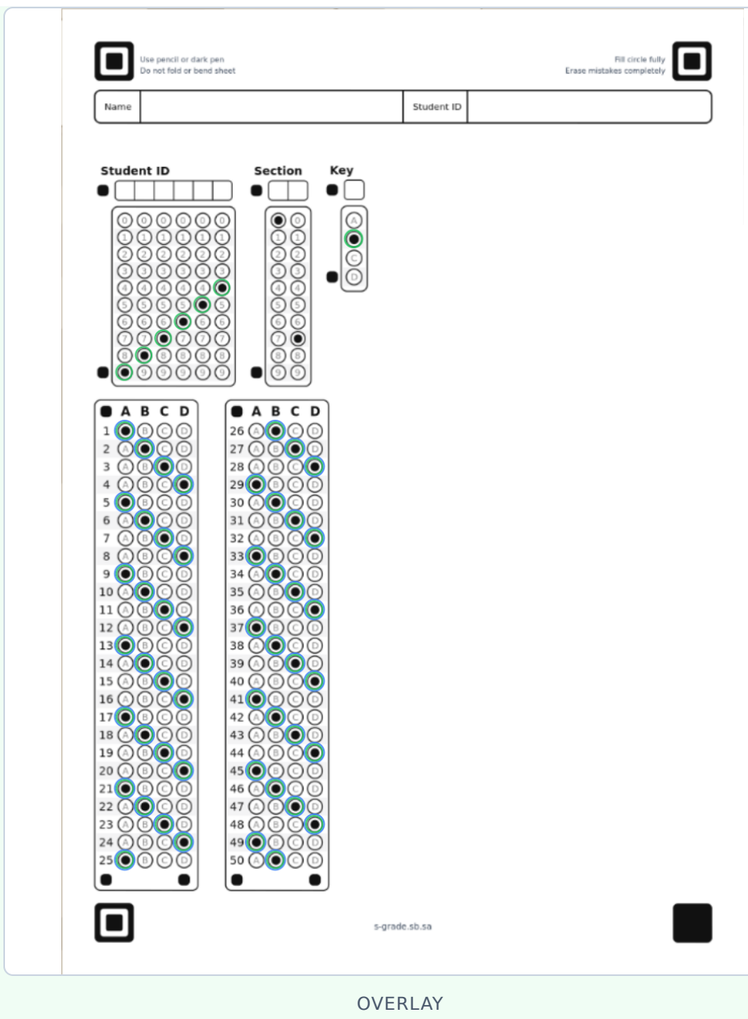
profile: `scene_small_centered` · 574 passed · 0 failed



INPUT



WARPED



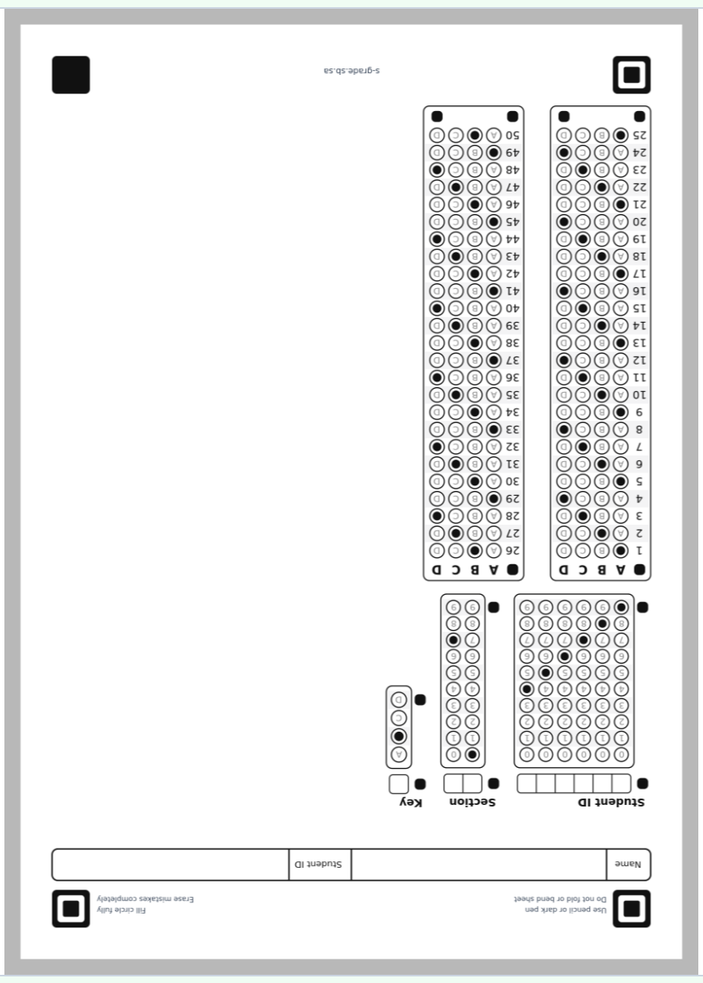
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

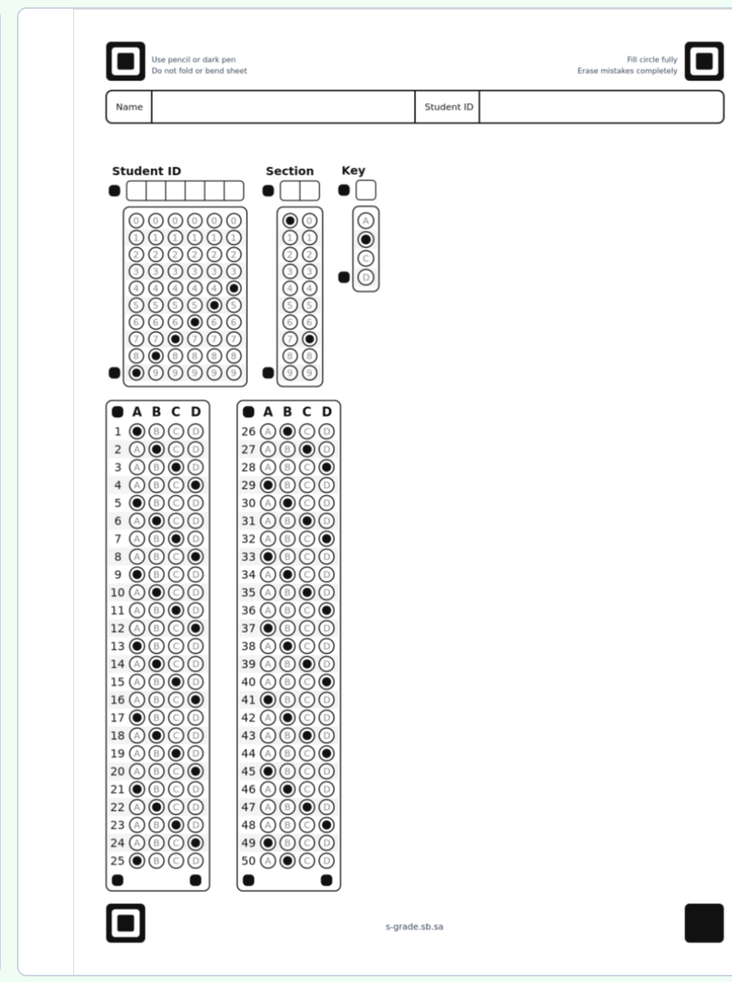
result.json

50q · upside down (180°) PASS

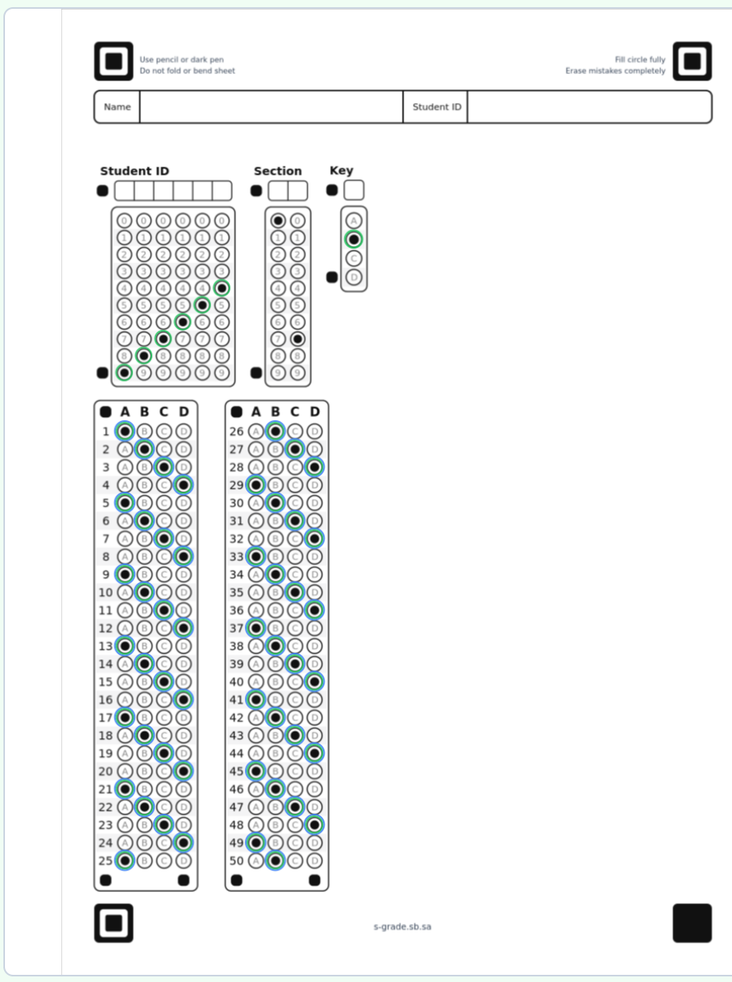
profile: `rotated_180deg` · 574 passed · 0 failed



INPUT



WARPED



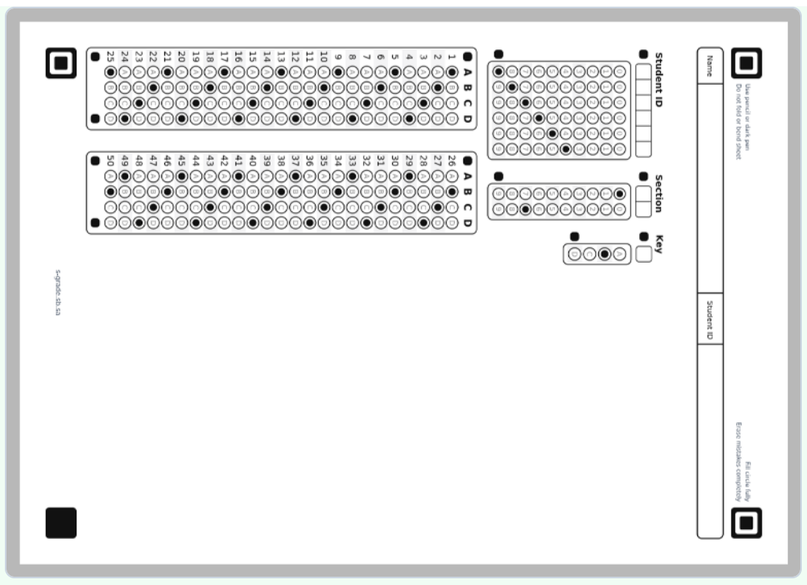
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

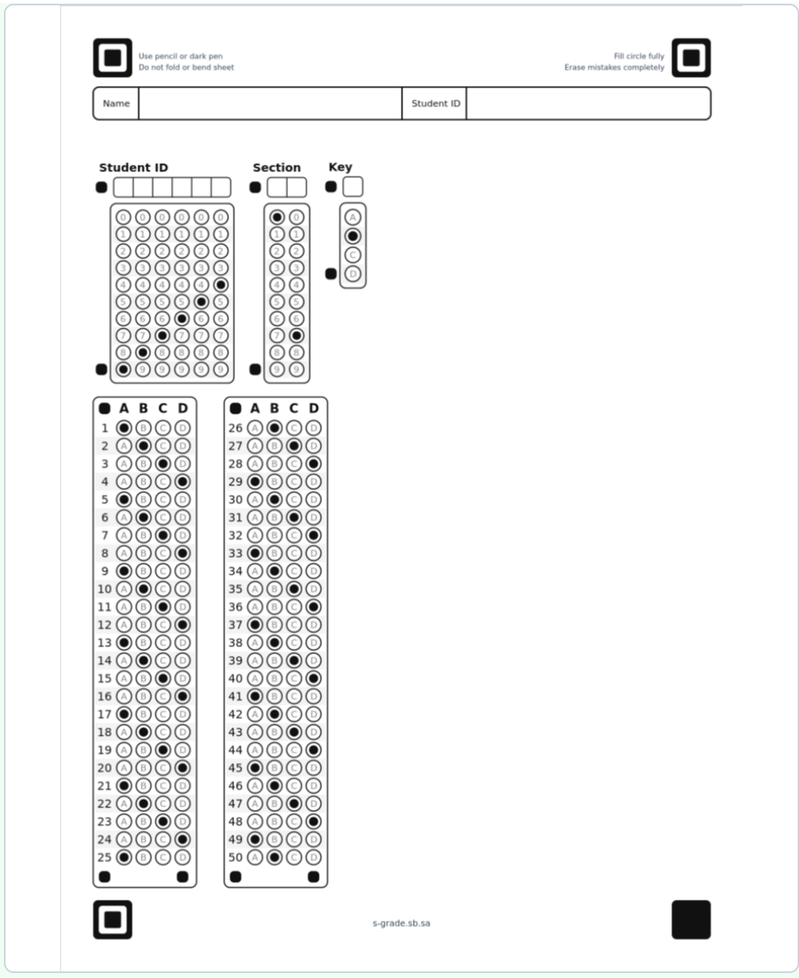
result.json

50q · sideways right (+90°) PASS

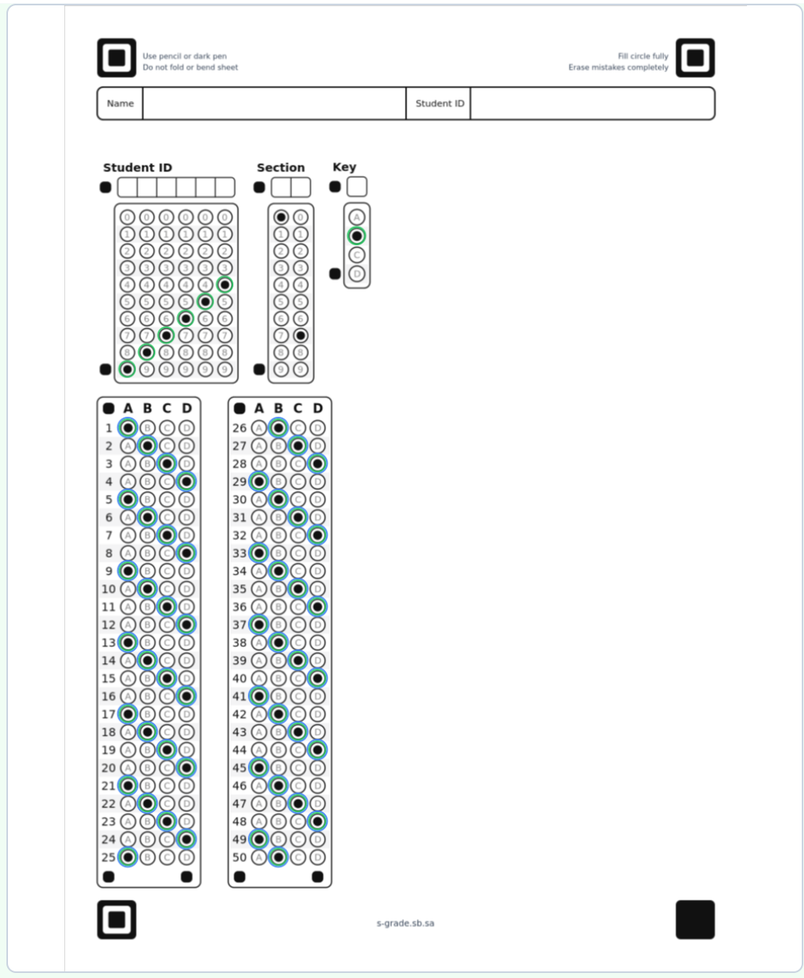
profile: `rotated_90deg` · 574 passed · 0 failed



INPUT



WARPED



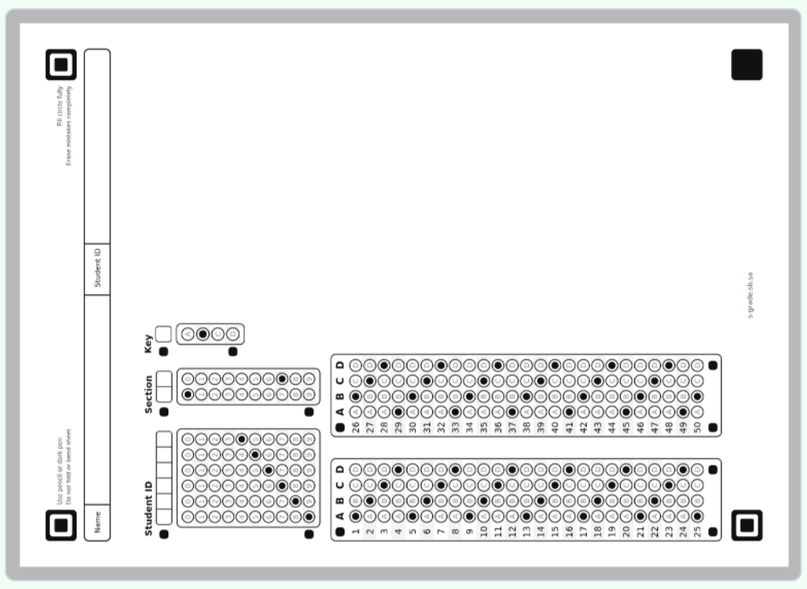
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

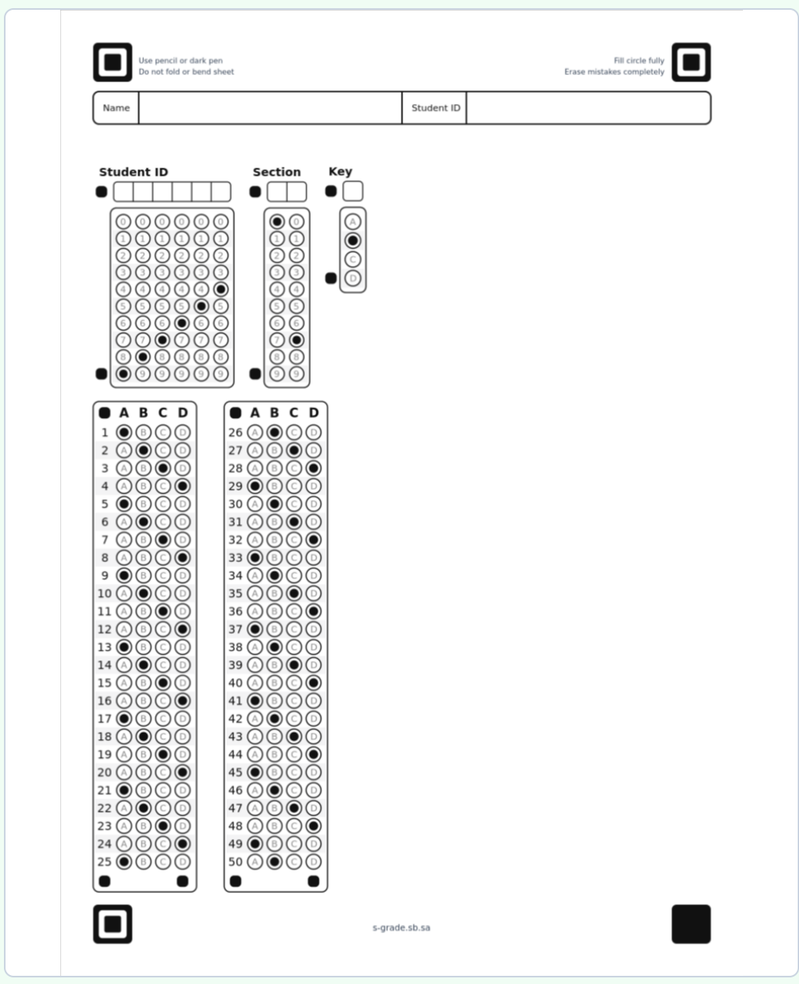
result.json

50q · sideways left (-90°) PASS

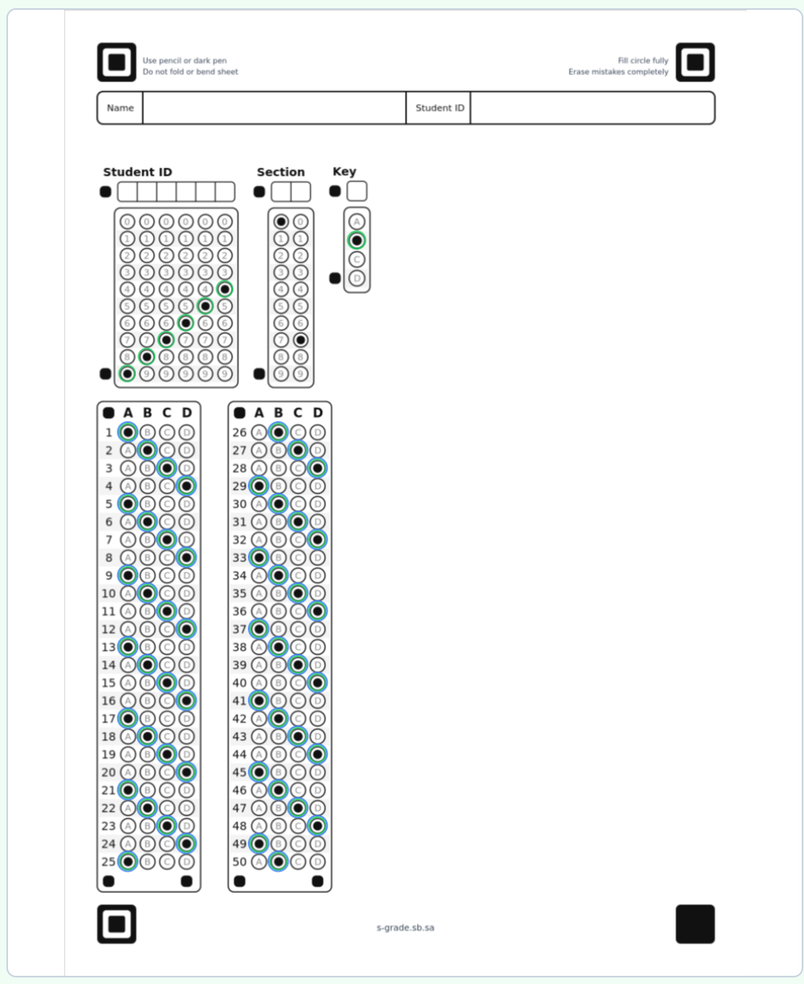
profile: `rotated_neg90deg` · 574 passed · 0 failed



INPUT



WARPED



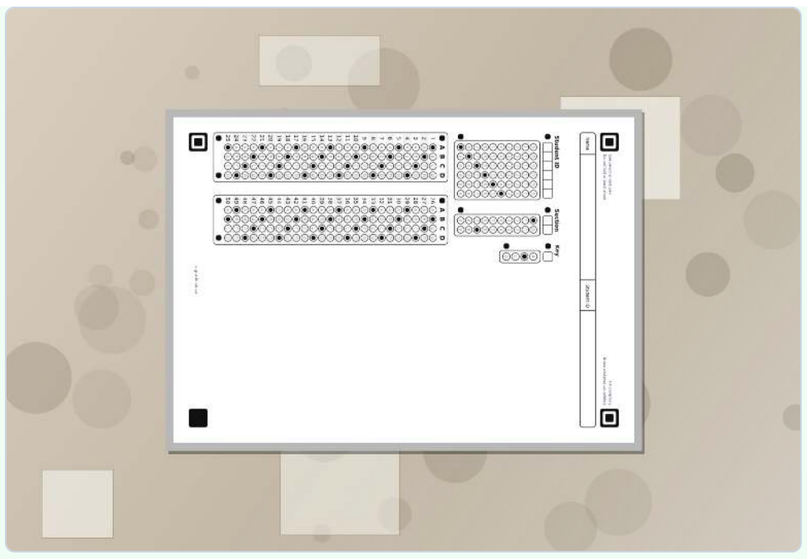
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

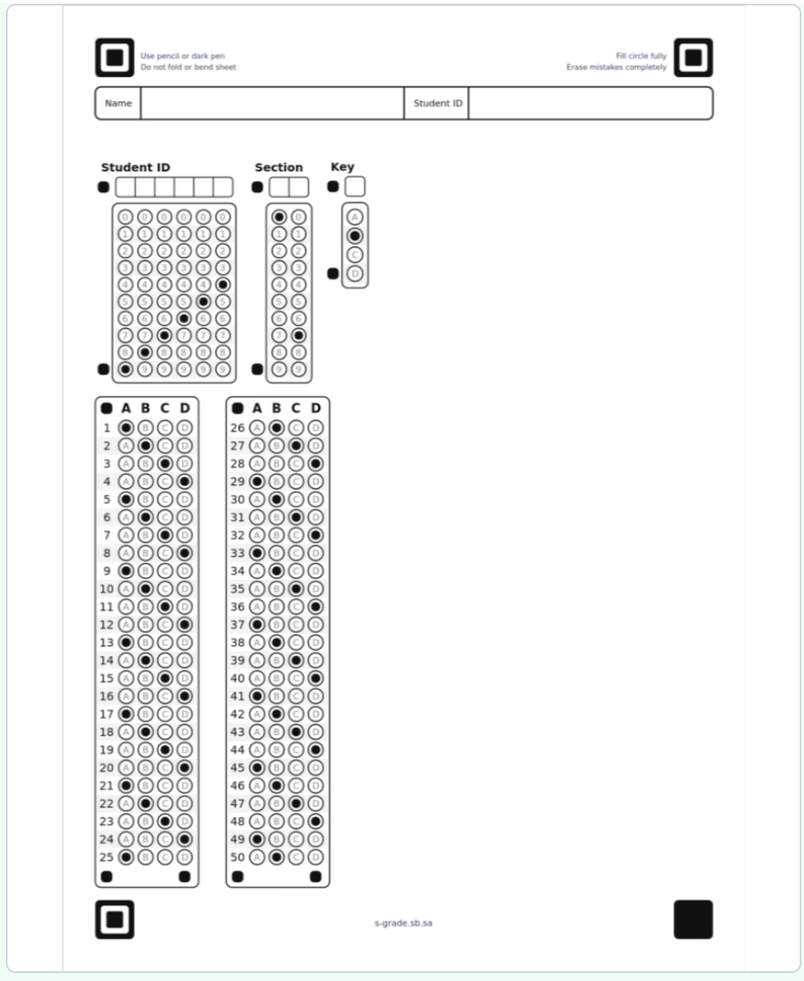
result.json

50q · landscape sheet in landscape frame PASS

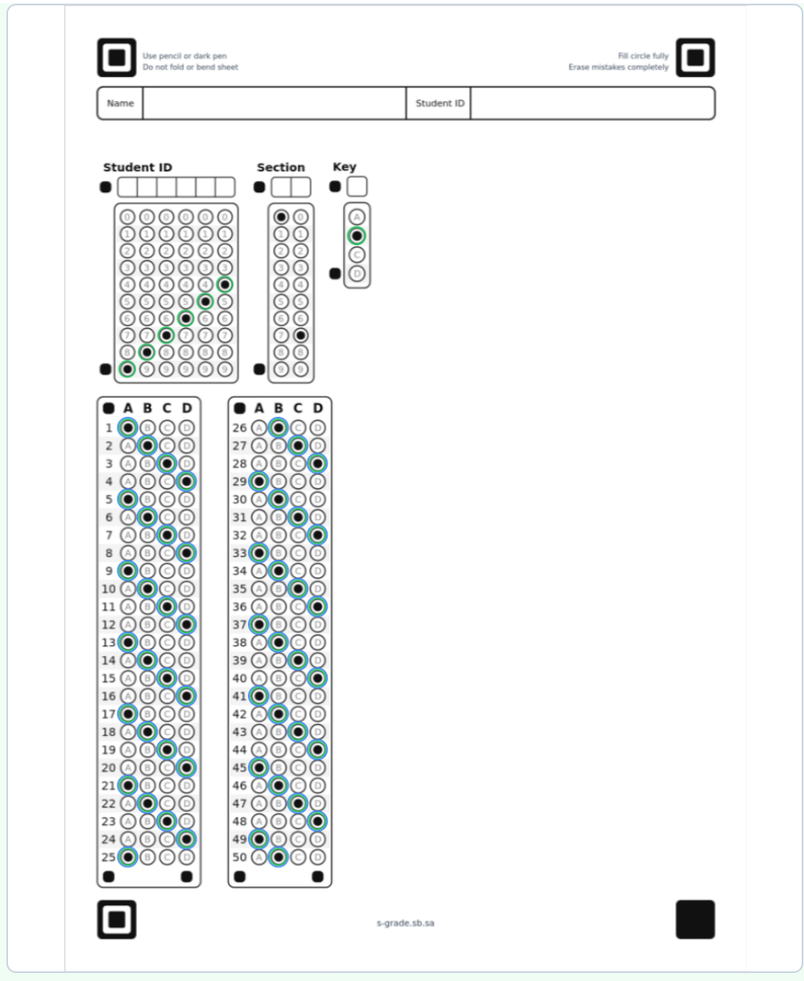
profile: `scene_landscape_frame` · 574 passed · 0 failed



INPUT



WARPED



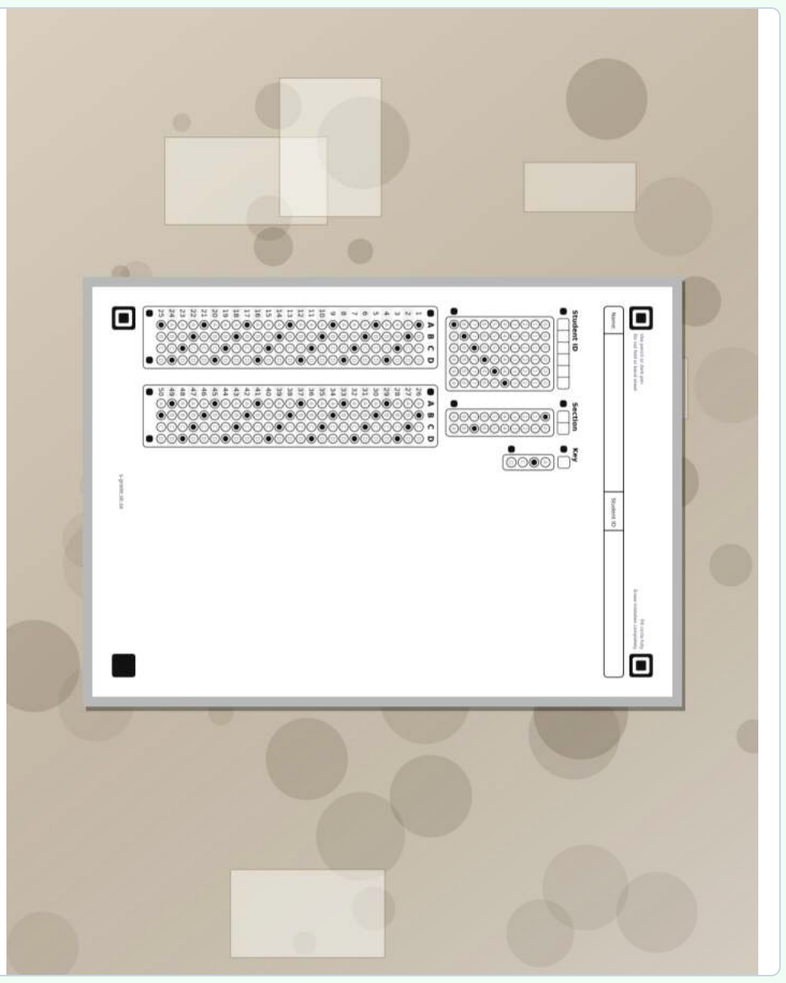
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

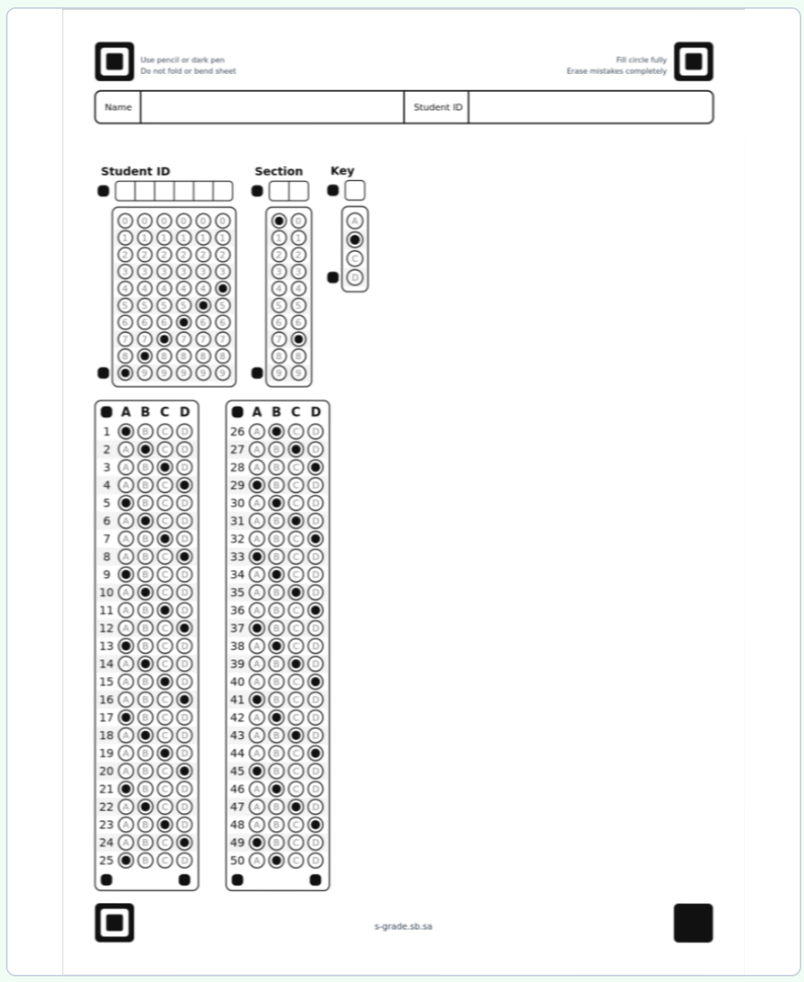
result.json

50q · landscape sheet in portrait frame PASS

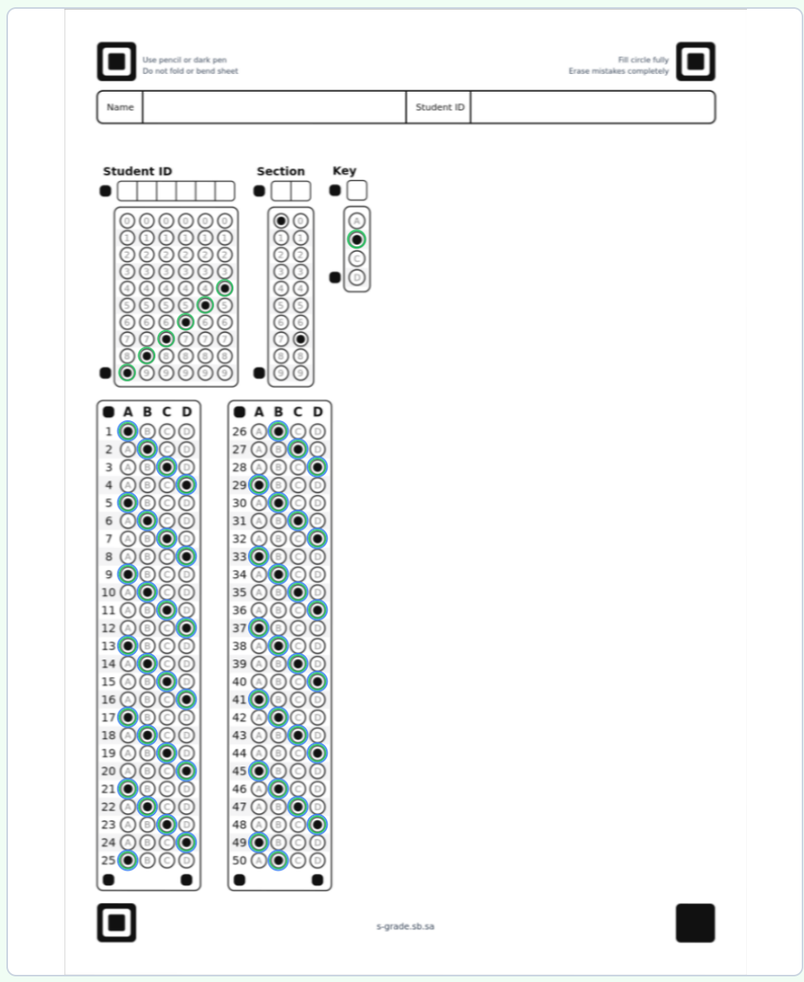
profile: `scene_landscape_in_portrait` · 574 passed · 0 failed



INPUT



WARPED



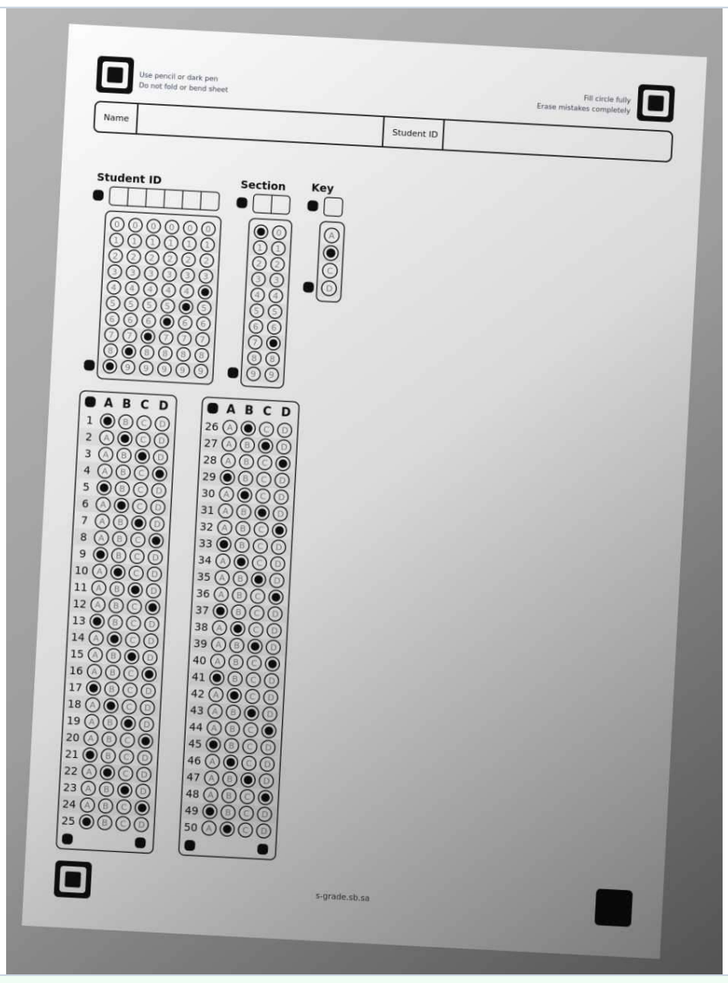
OVERLAY

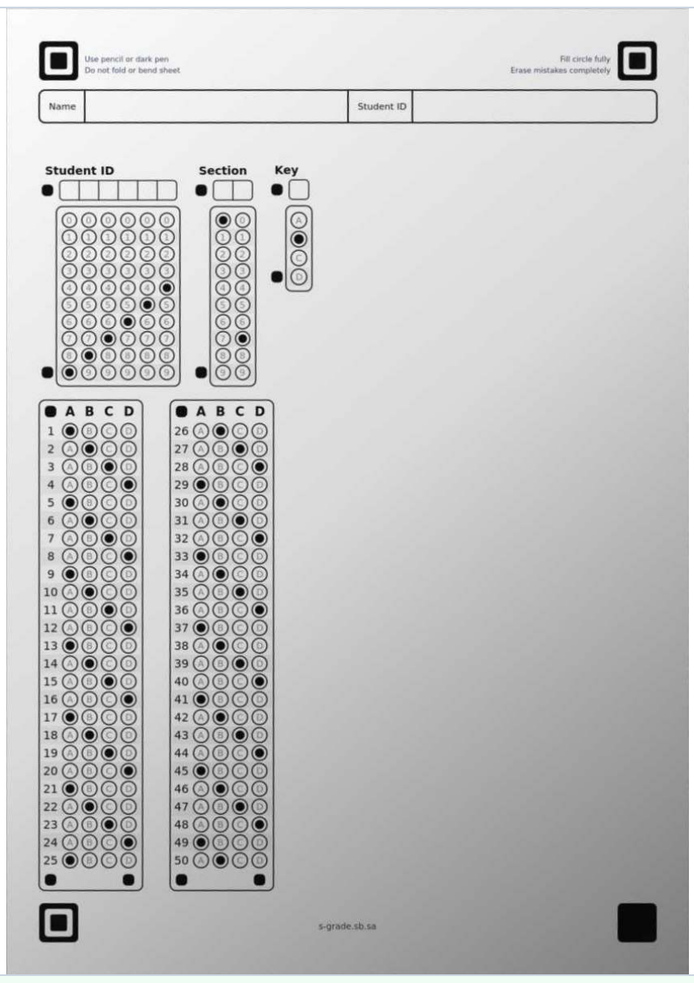
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

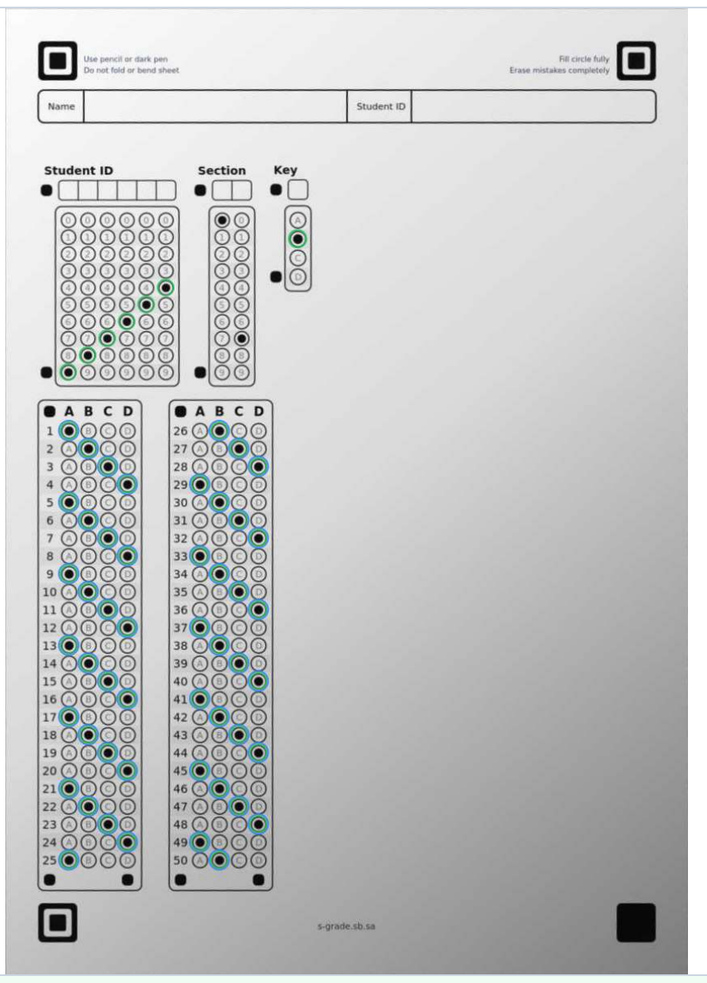
result.json

50q · combo rotation + gradient + jpeg PASS

profile: `rotated_3deg → lighting_gradient → jpeg_q50` · 574 passed · 0 failed







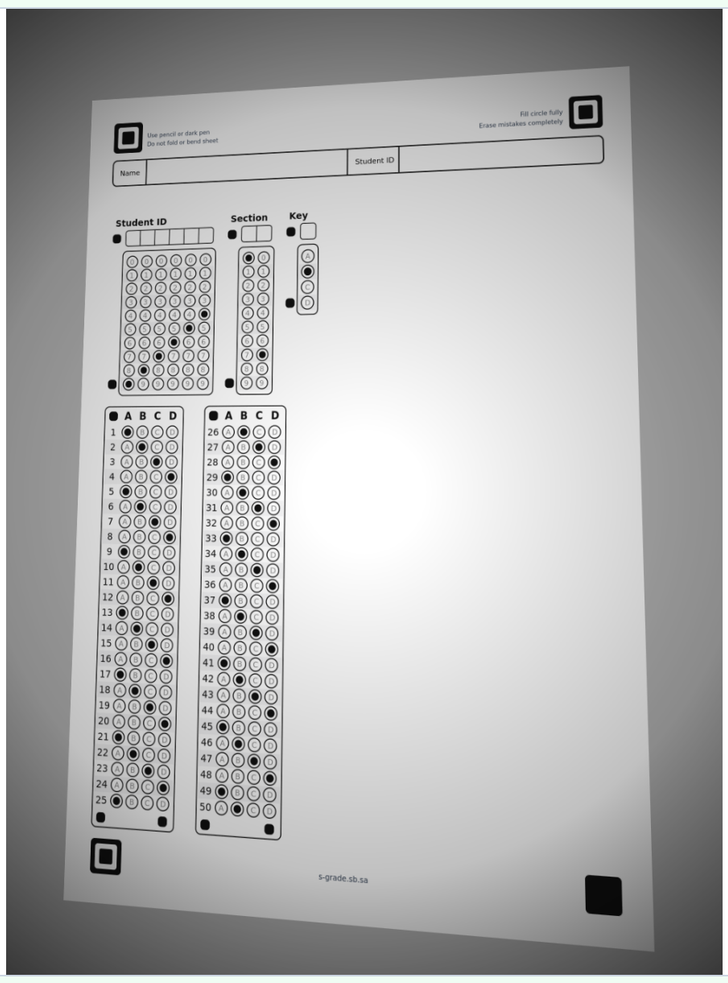
INPUT WARPED OVERLAY

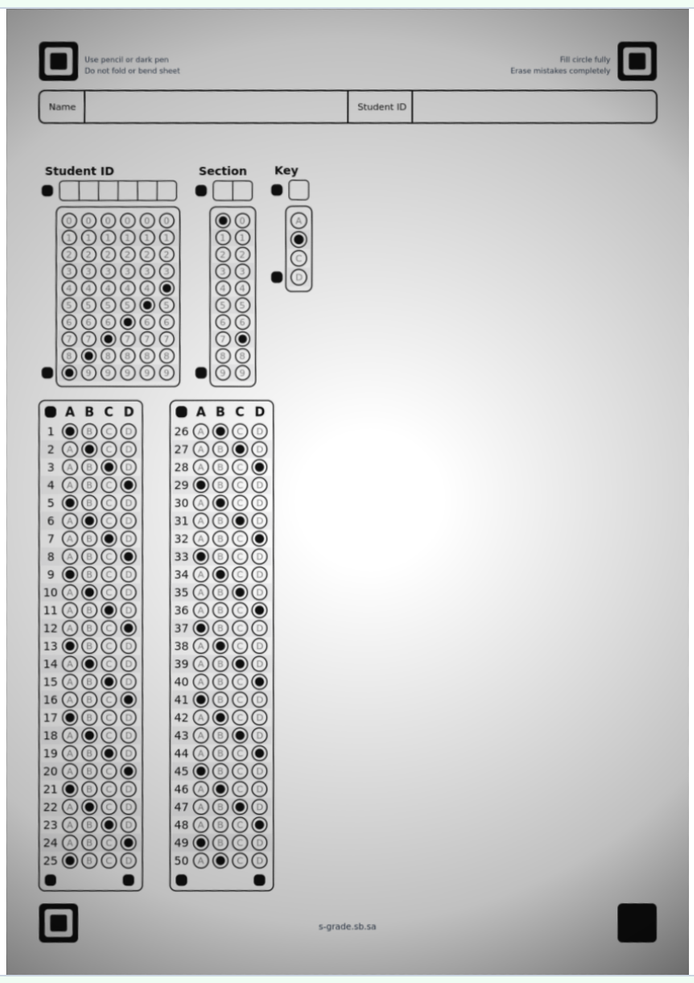
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

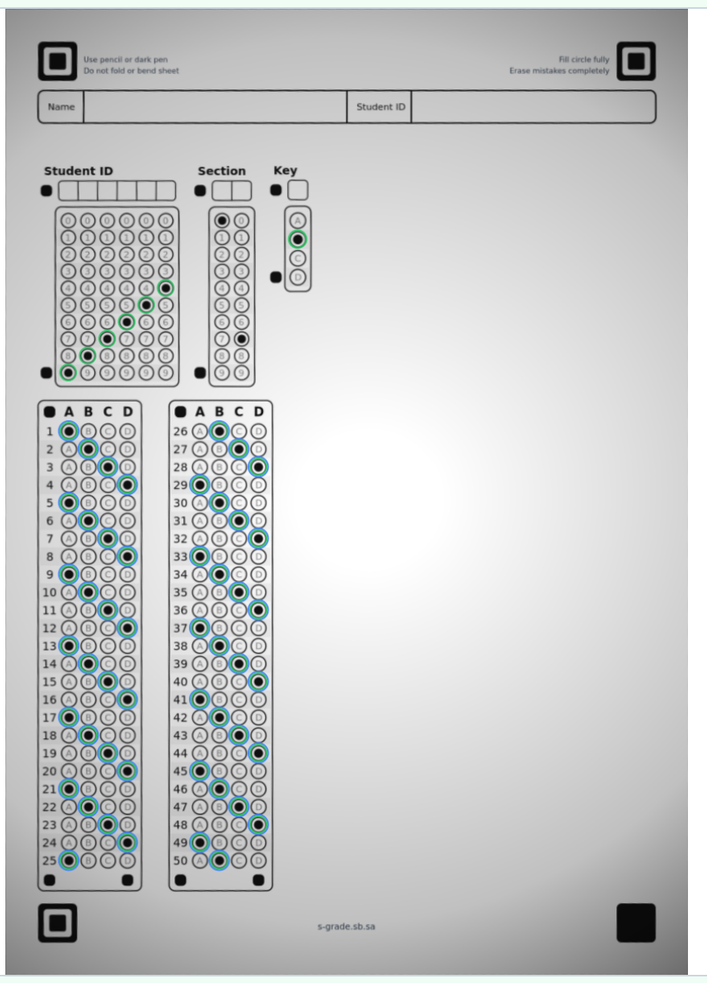
result.json

50q · combo perspective + vignette PASS

profile: `perspective_mild → lighting_vignette` · 574 passed · 0 failed







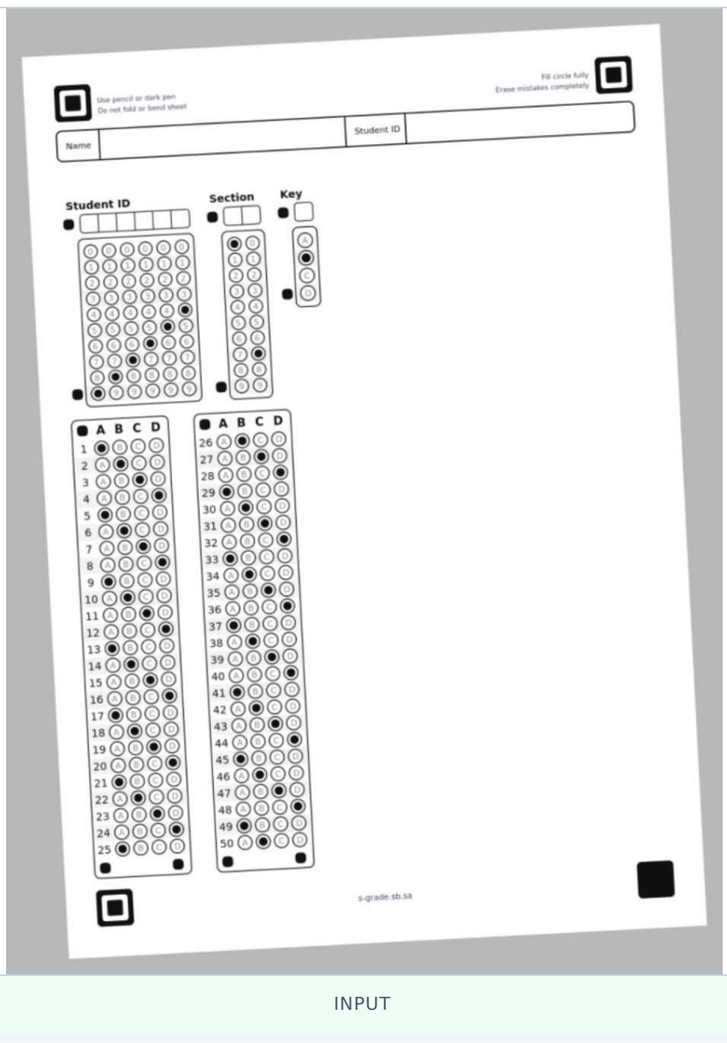
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

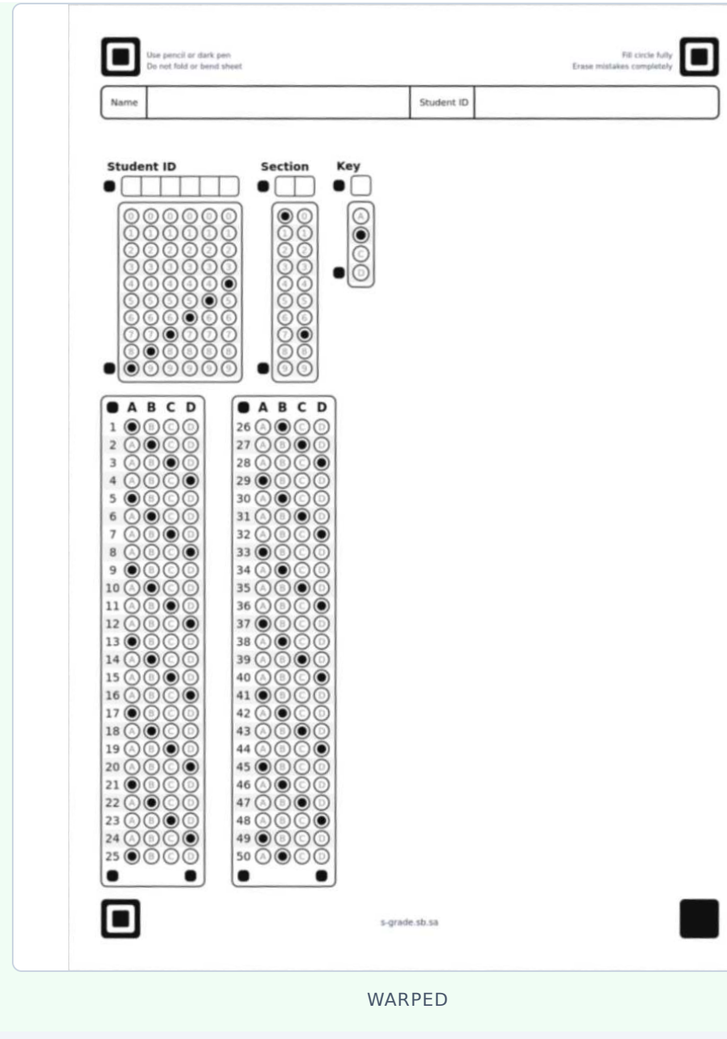
result.json

50q · combo -rotation + low res + jpeg PASS

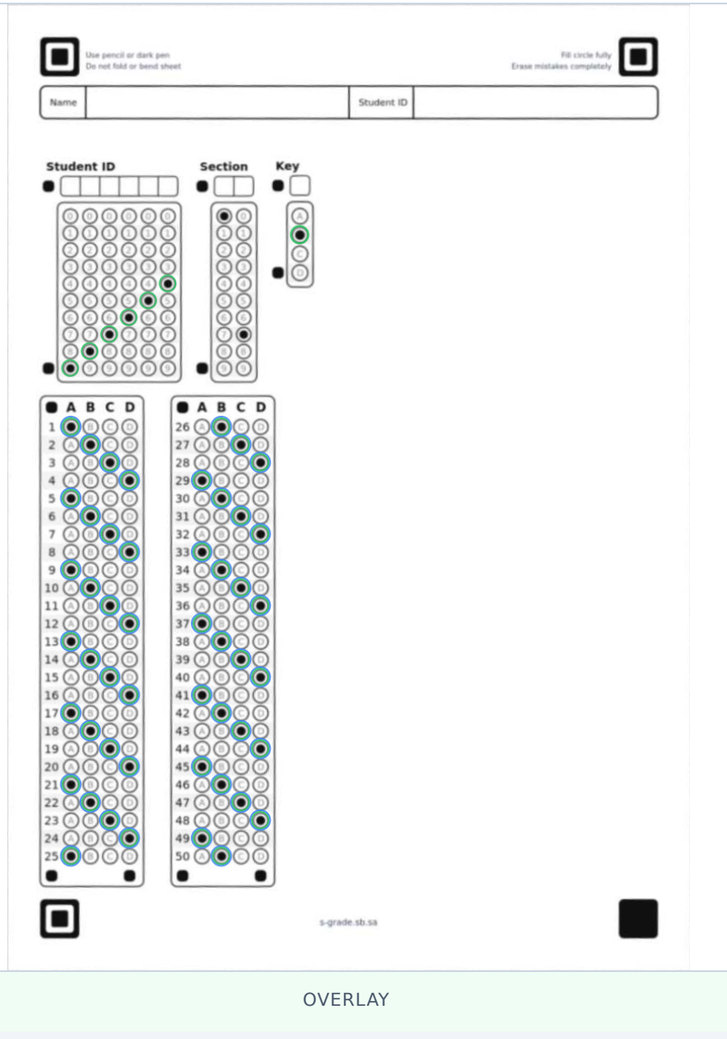
profile: `rotated_neg3deg → low_res → jpeg_q50` · 574 passed · 0 failed



INPUT



WARPED



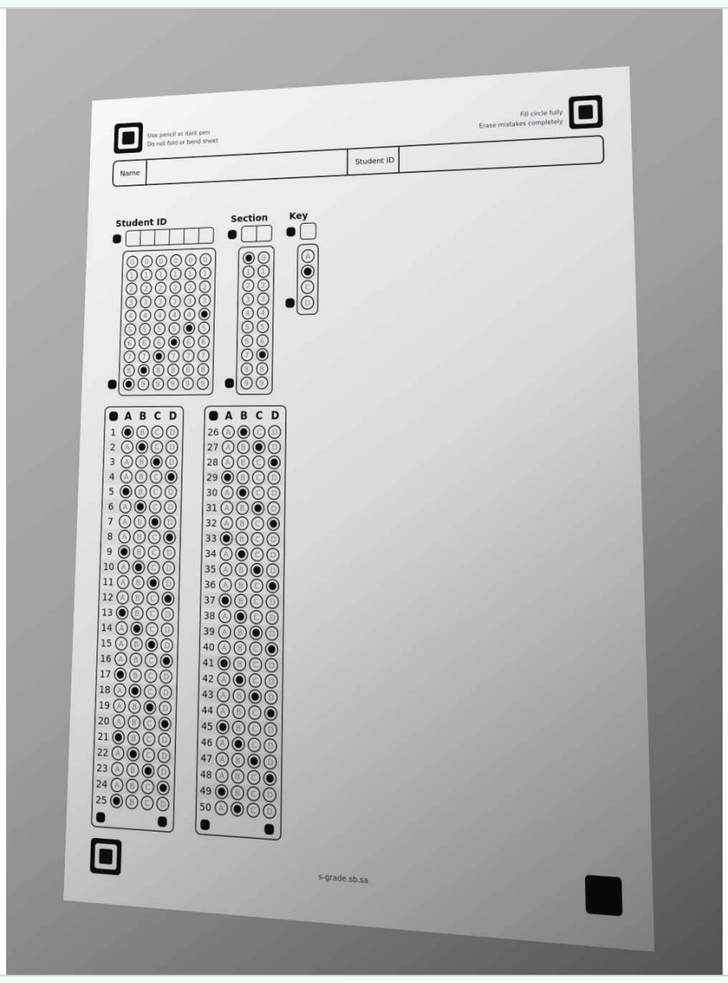
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

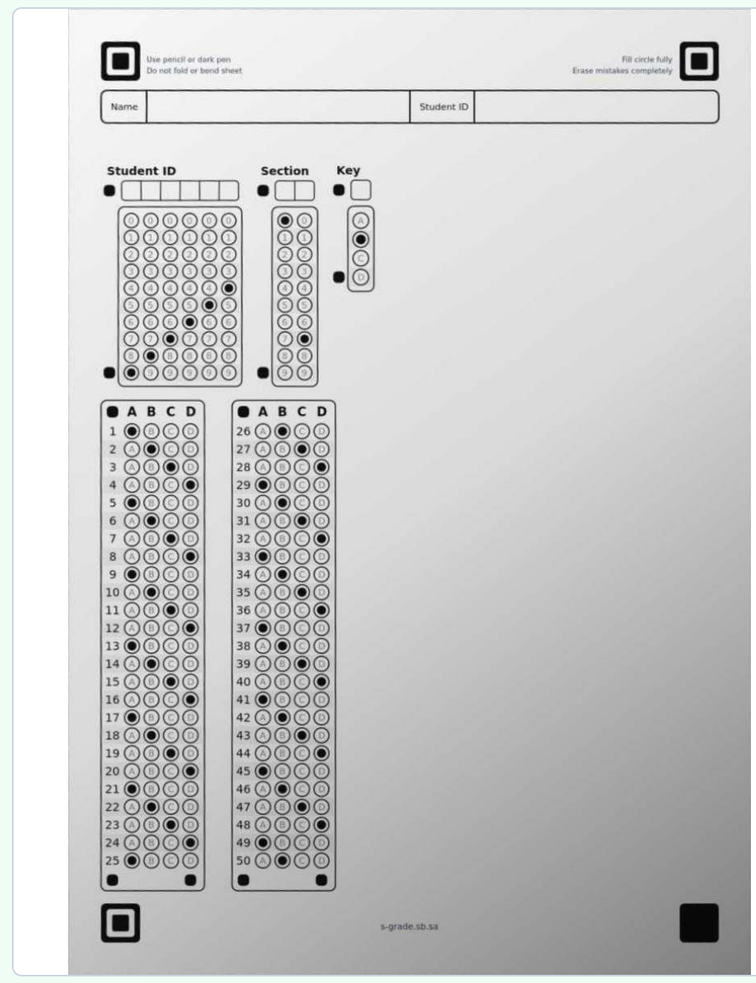
result.json

50q · combo perspective + gradient + jpeg PASS

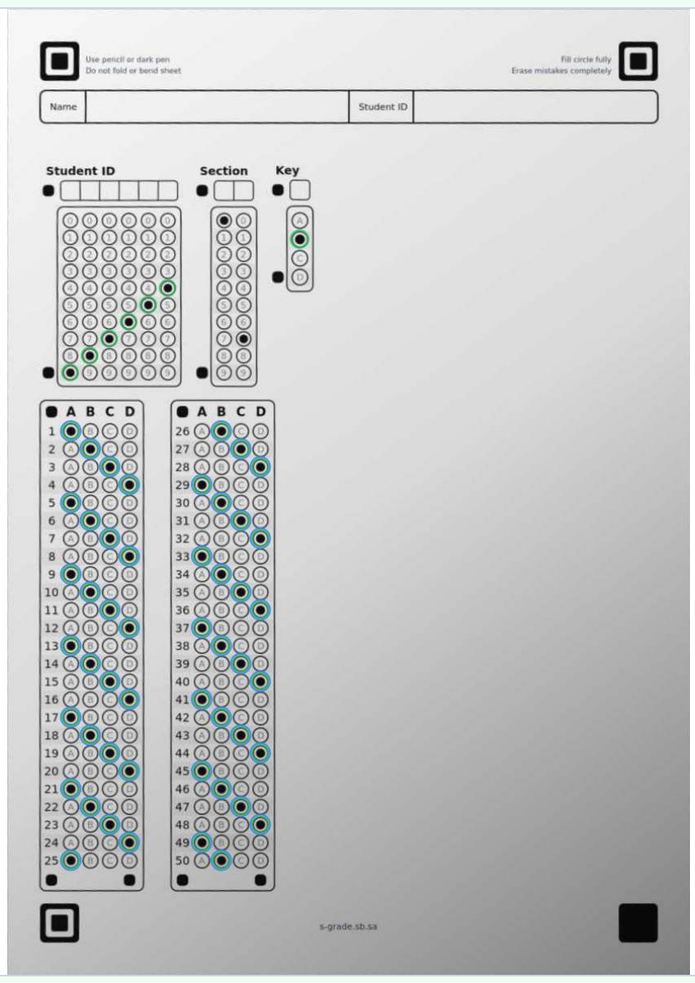
profile: `perspective_mild → lighting_gradient → jpeg_q50` · 574 passed · 0 failed



INPUT



WARPED



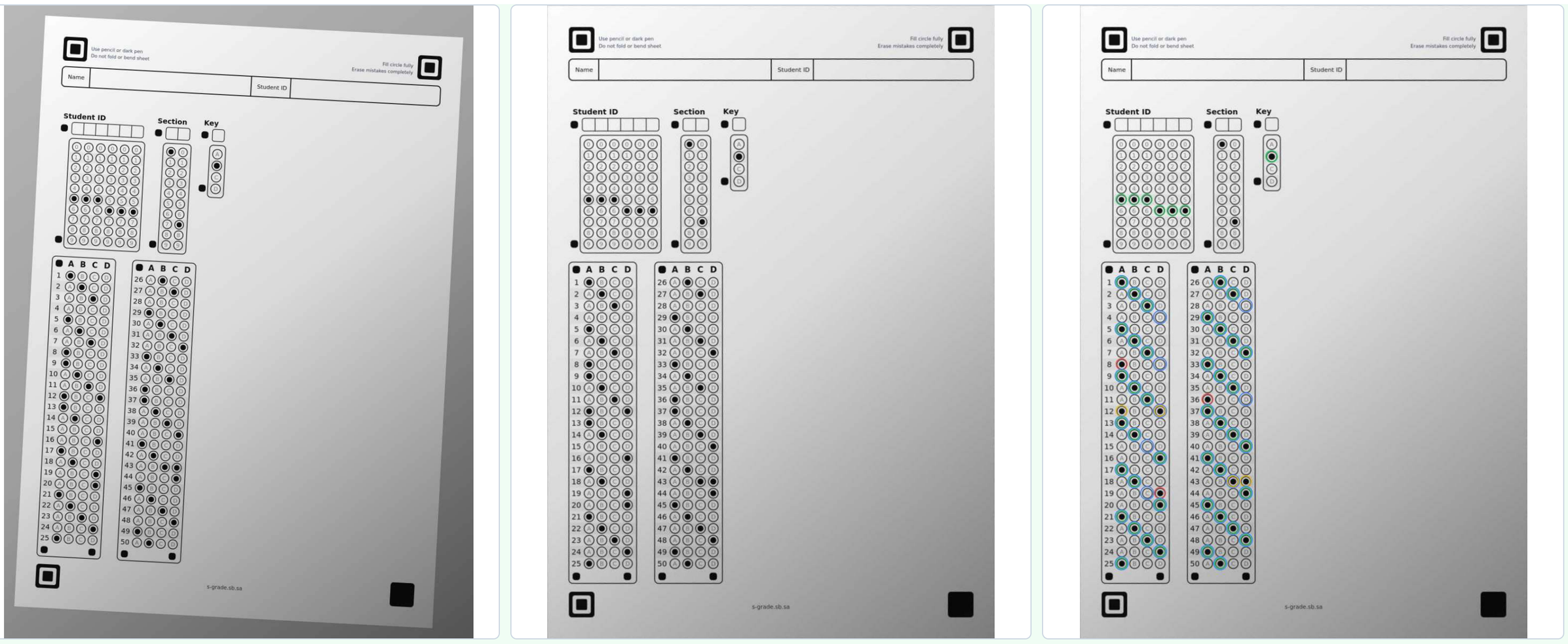
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · mixed + rotation + gradient + jpeg PASS

profile: `rotated_3deg → lighting_gradient → jpeg_q50` · 574 passed · 0 failed



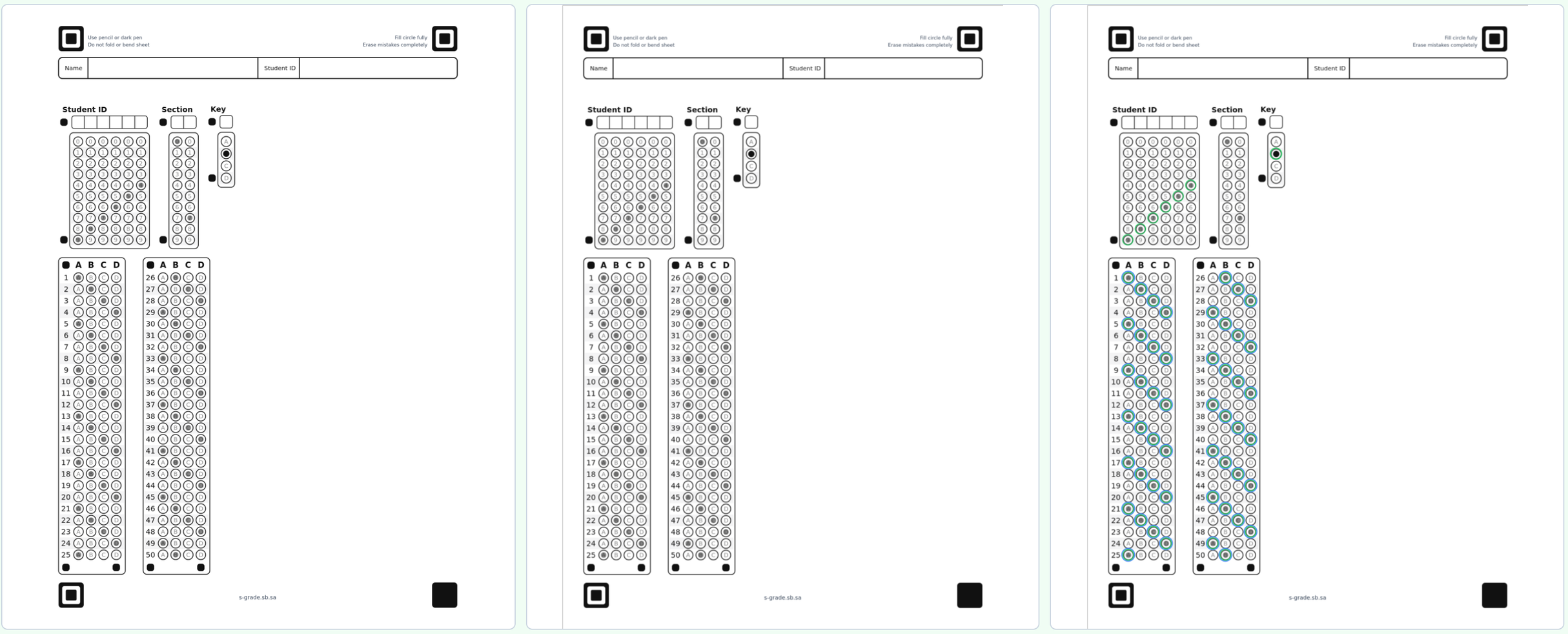
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`555666`	`555666`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`42`	`42`	✓

result.json

50q · light pencil fills PASS

profile: `pristine` · 574 passed · 0 failed



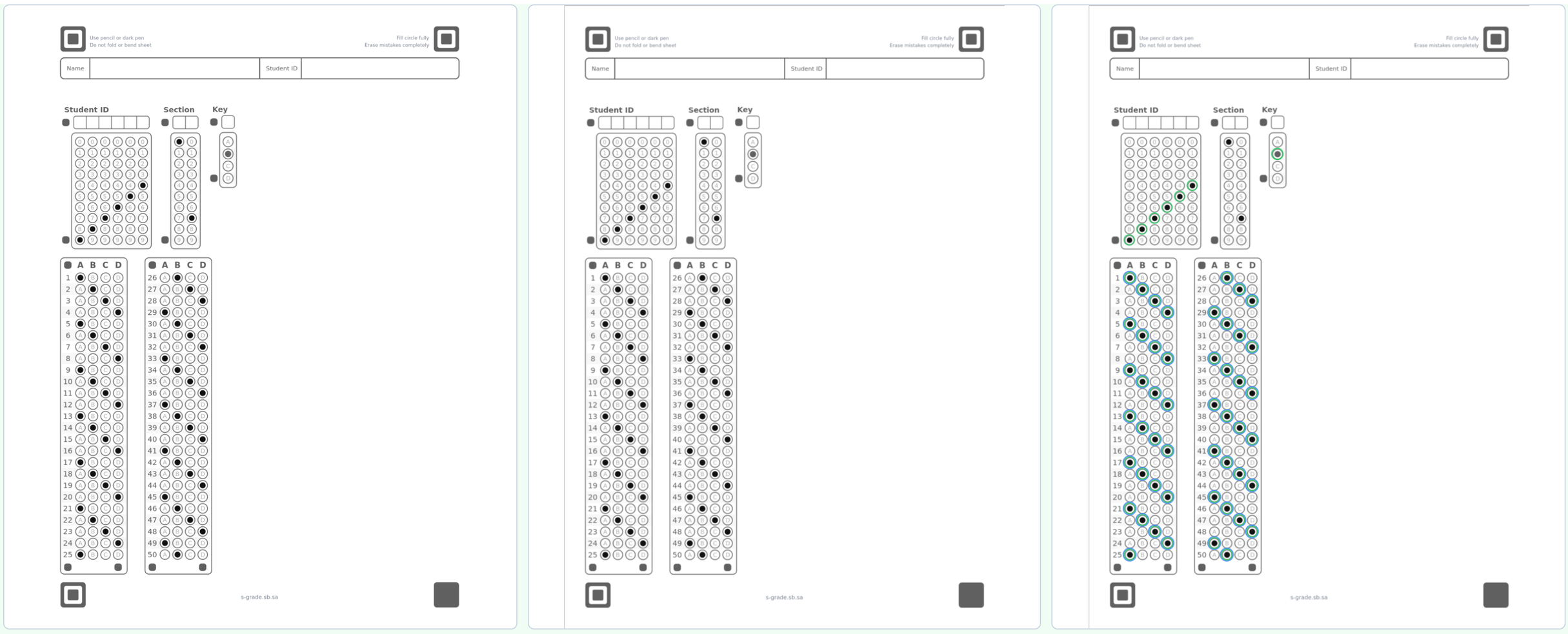
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · low toner print PASS

profile: `pristine` · 574 passed · 0 failed



INPUT

WARPED

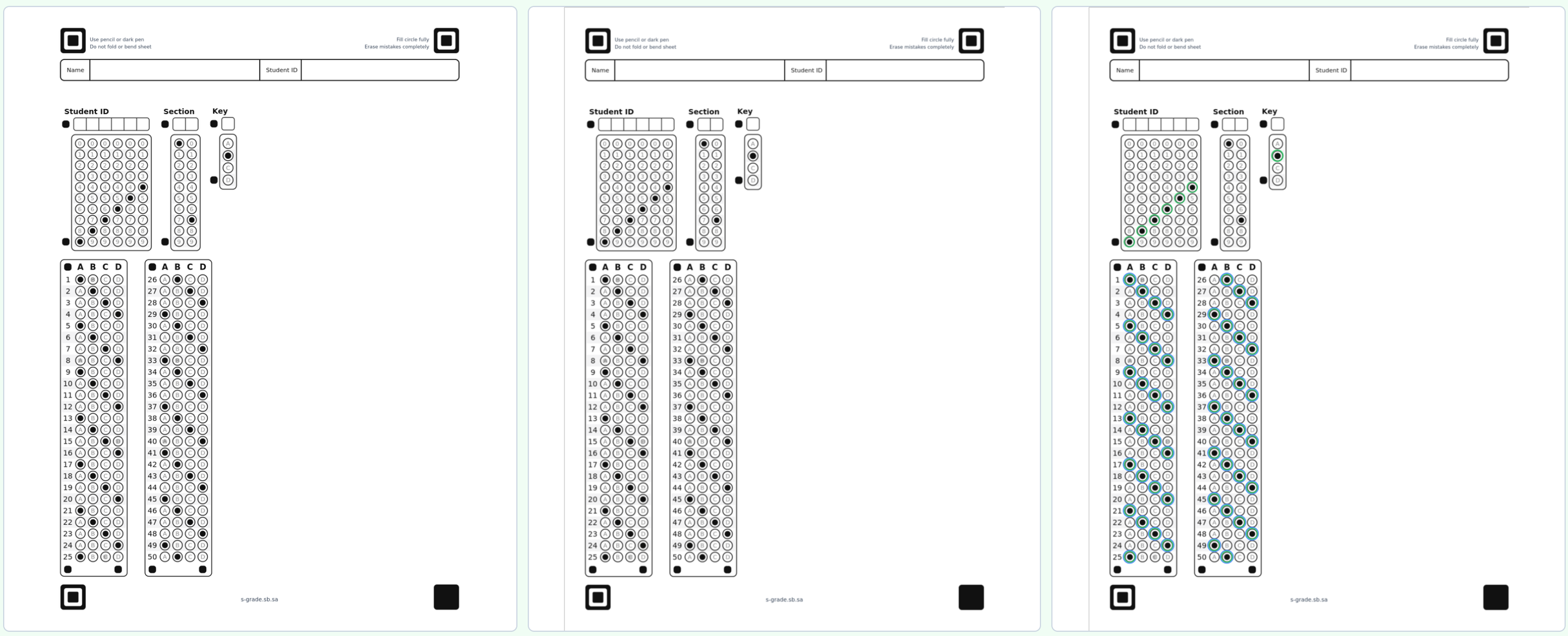
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · eraser smudges PASS

profile: `pristine` · 574 passed · 0 failed



INPUT

WARPED

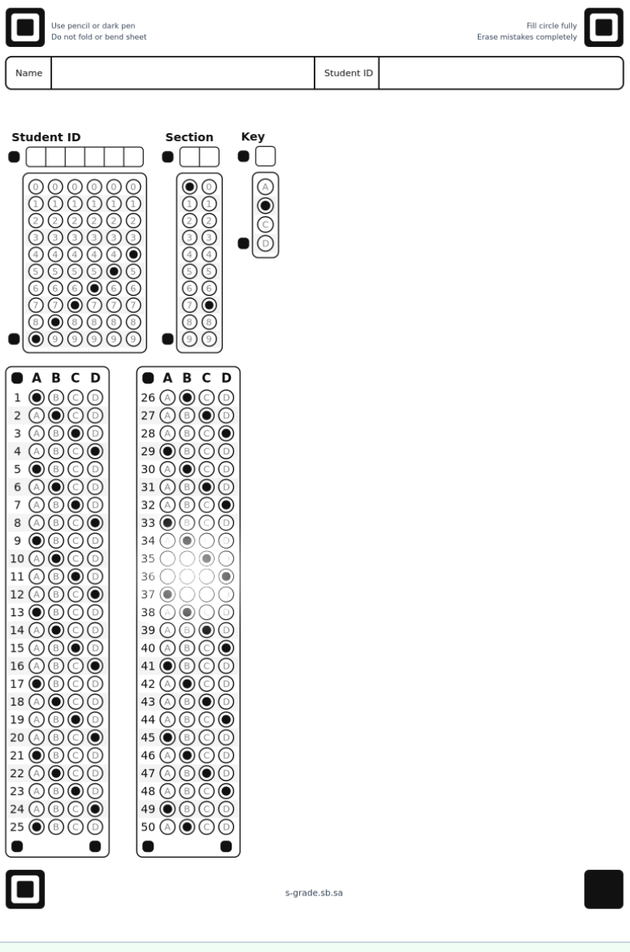
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

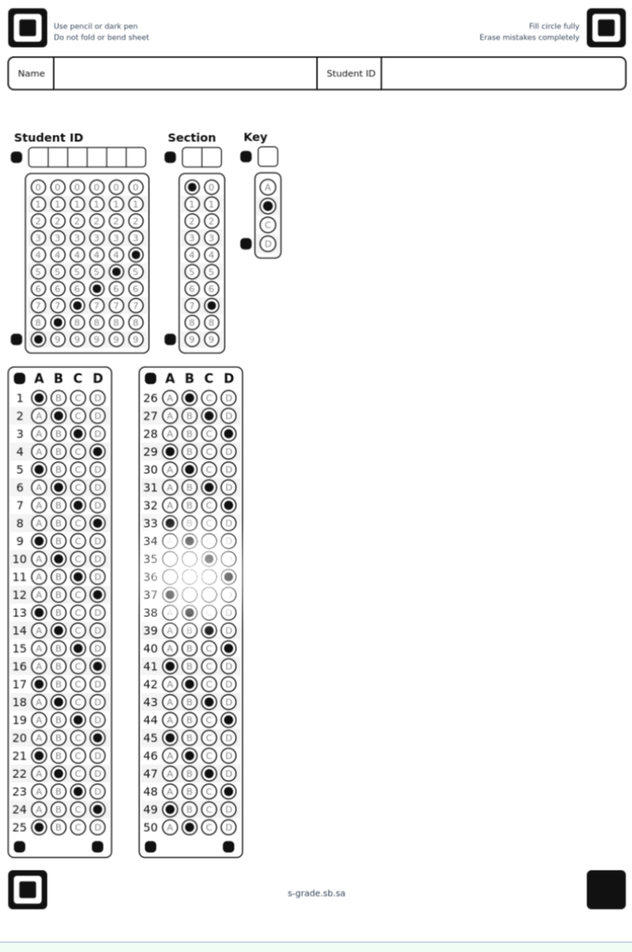
result.json

50q · glare hotspot PASS

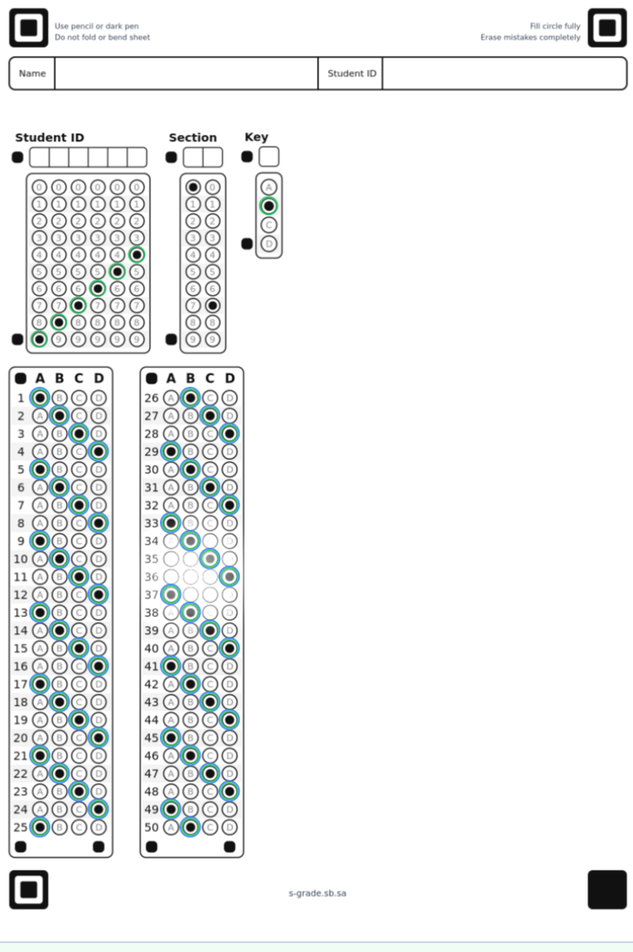
profile: `glare_hotspot` · 574 passed · 0 failed



INPUT



WARPED



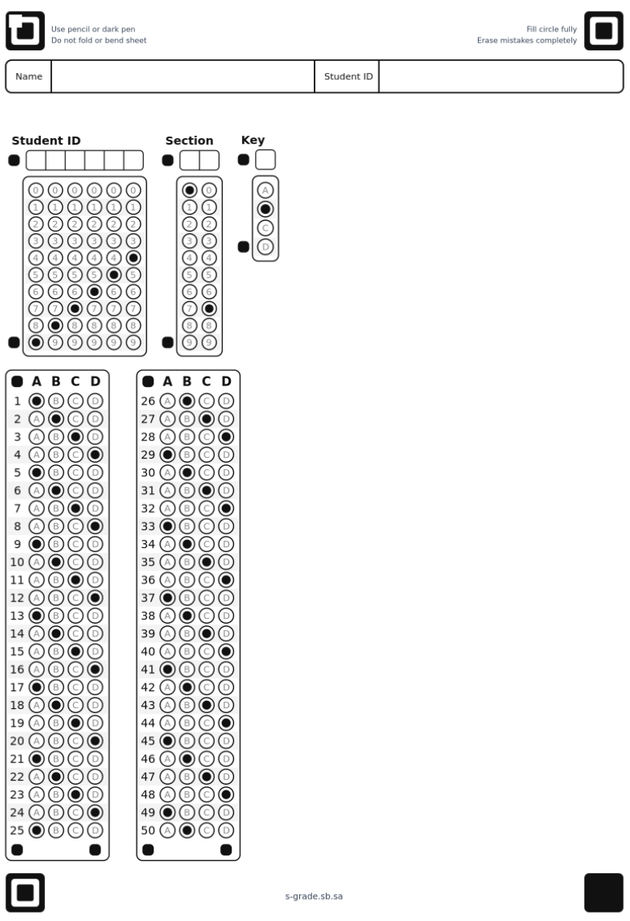
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

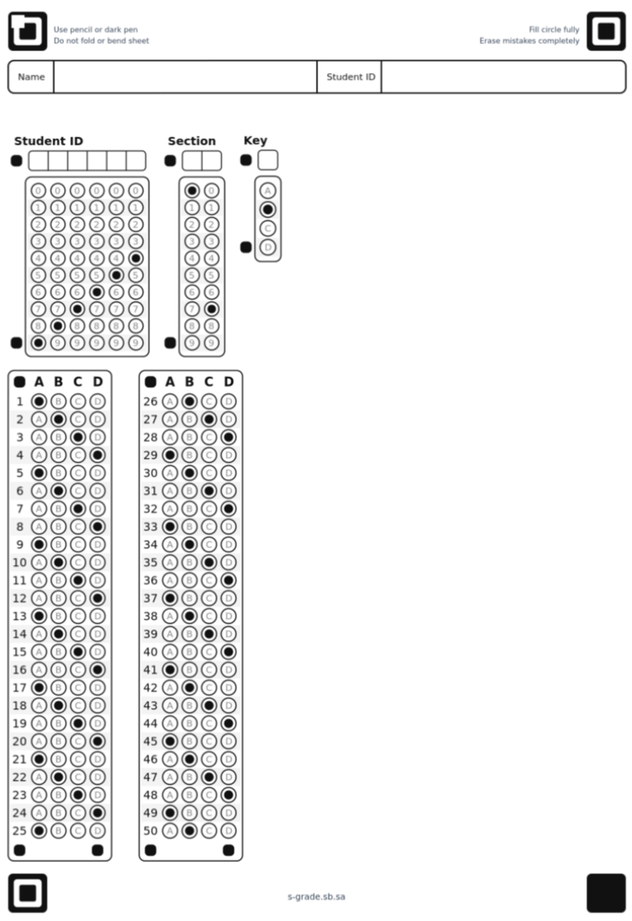
result.json

50q · damaged fiducial (TL) PASS

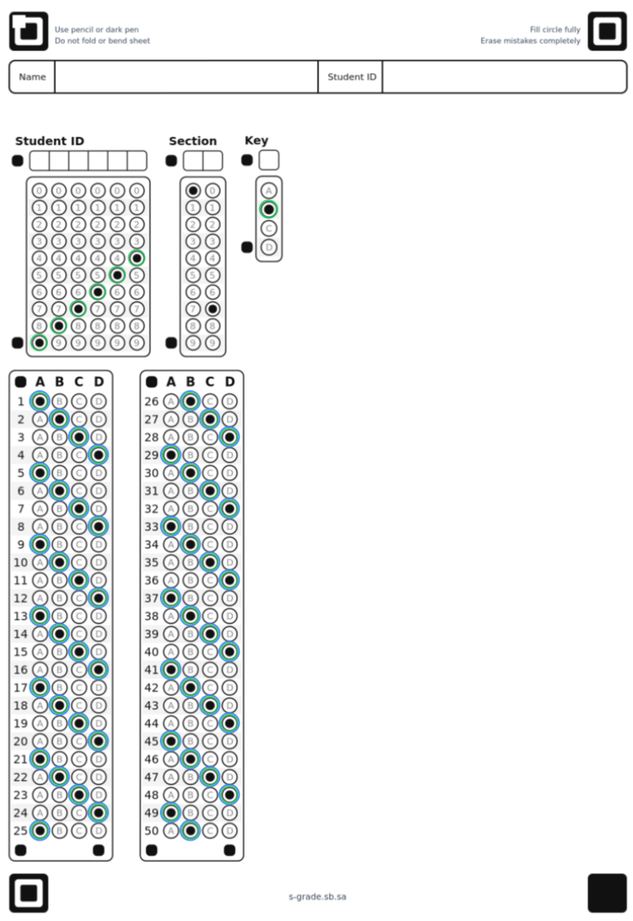
profile: `damaged_fiducial_tl` · 574 passed · 0 failed



INPUT



WARPED



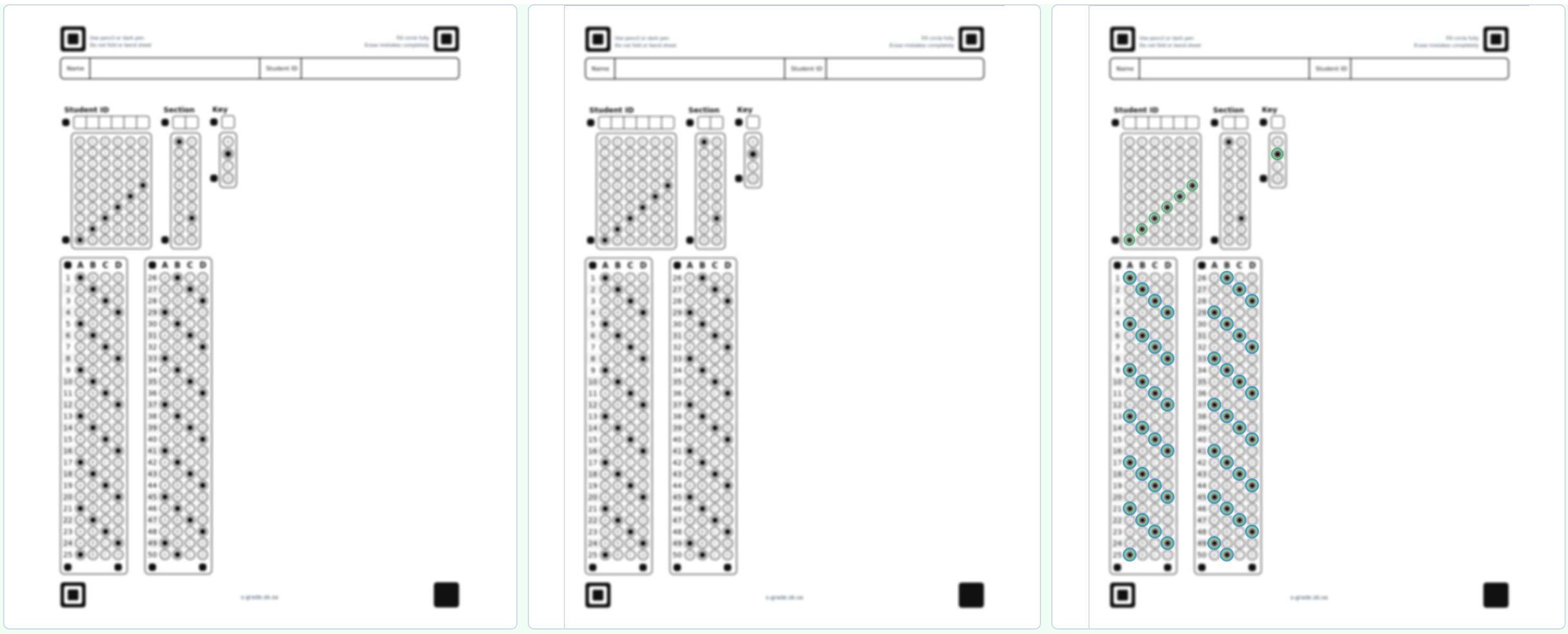
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · out of focus (gaussian) PASS

profile: `out_of_focus` · 574 passed · 0 failed



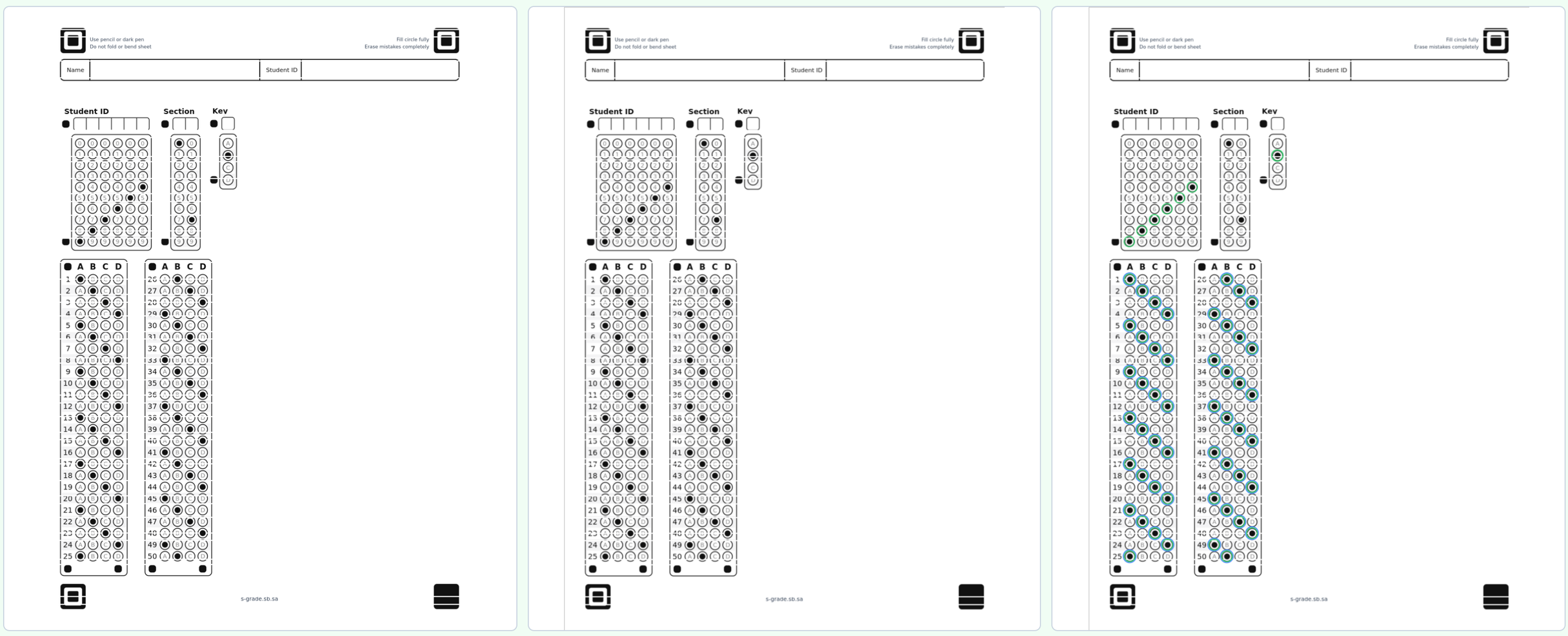
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · streaky printer bands PASS

profile: `pristine` · 574 passed · 0 failed



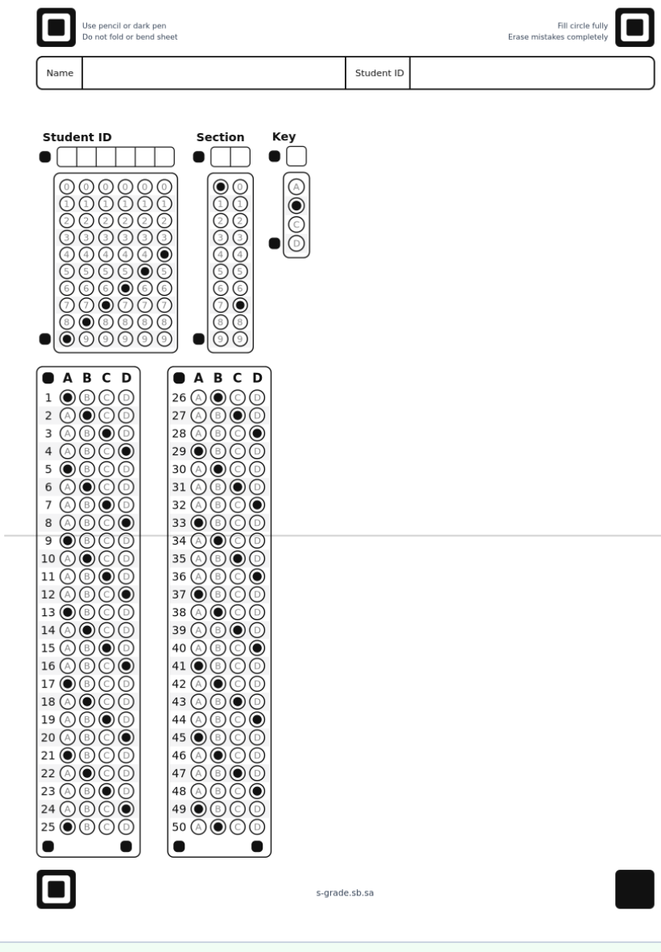
INPUT WARPED OVERLAY

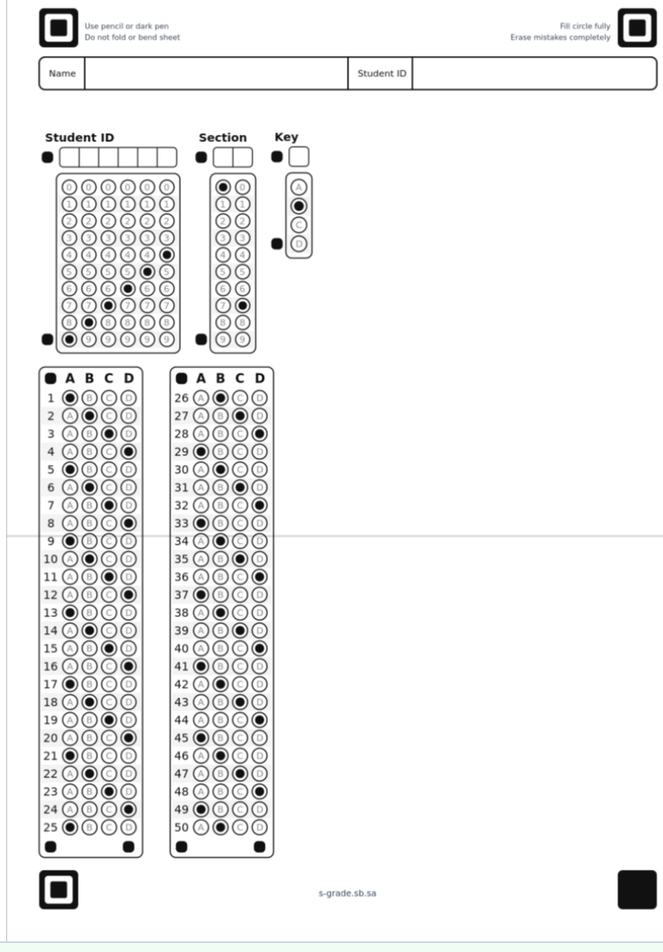
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

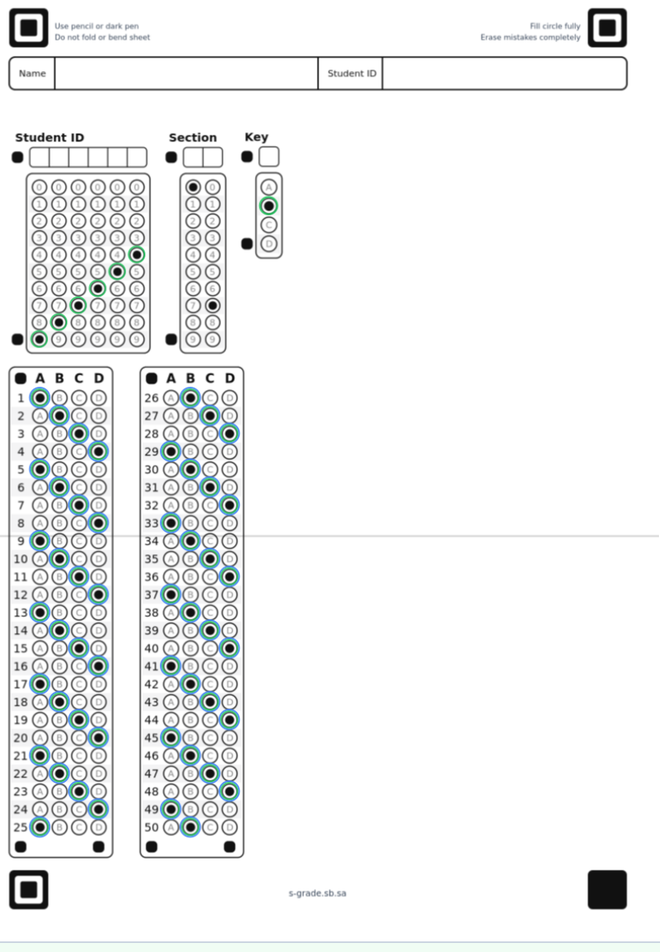
result.json

50q · fold crease line PASS

profile: `fold_crease` · 574 passed · 0 failed







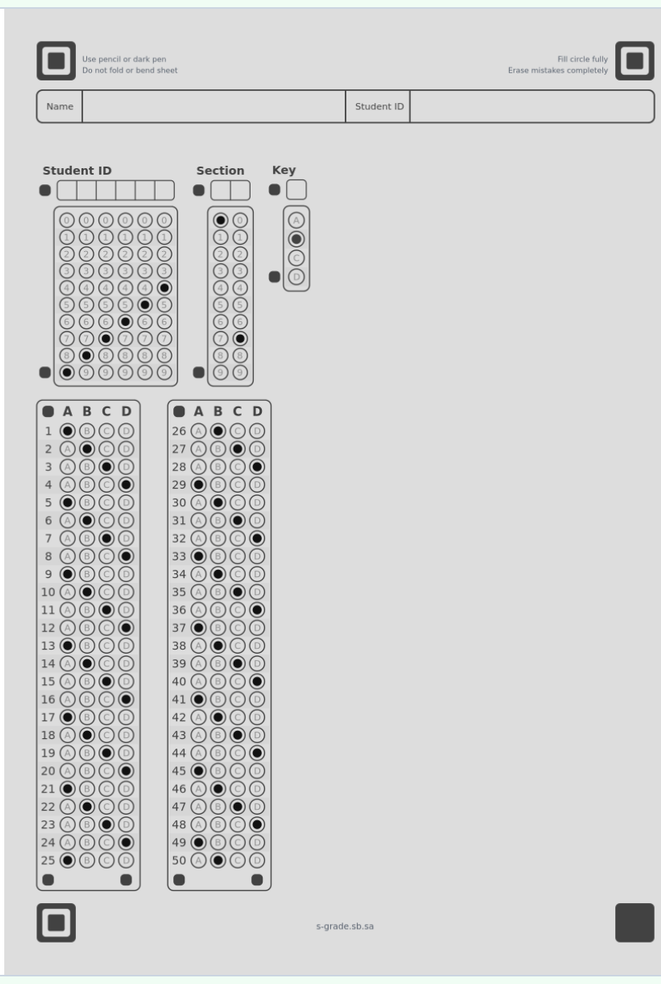
INPUT WARPED OVERLAY

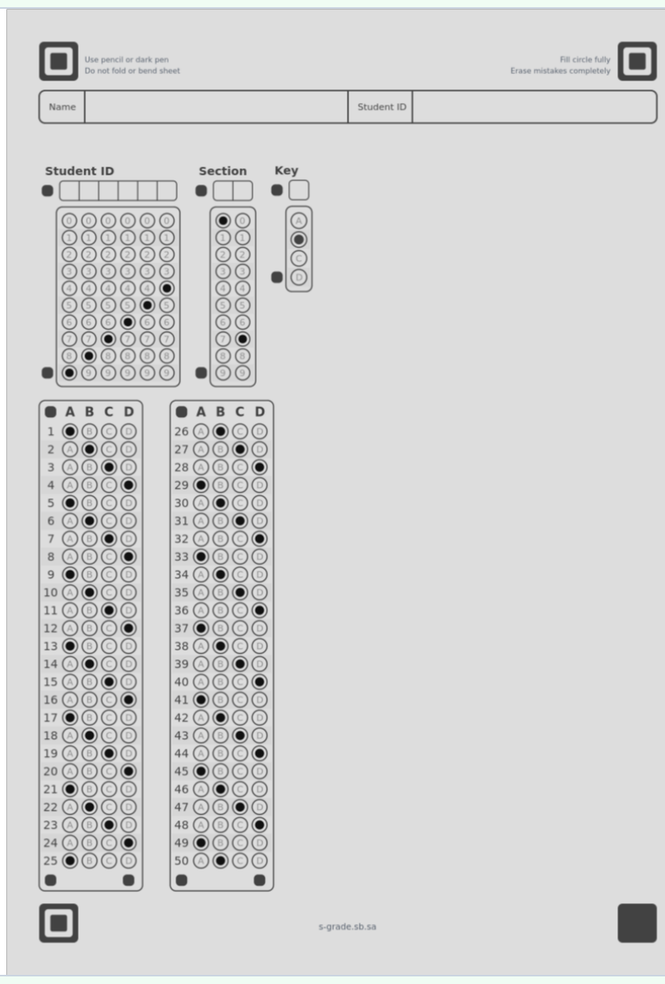
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

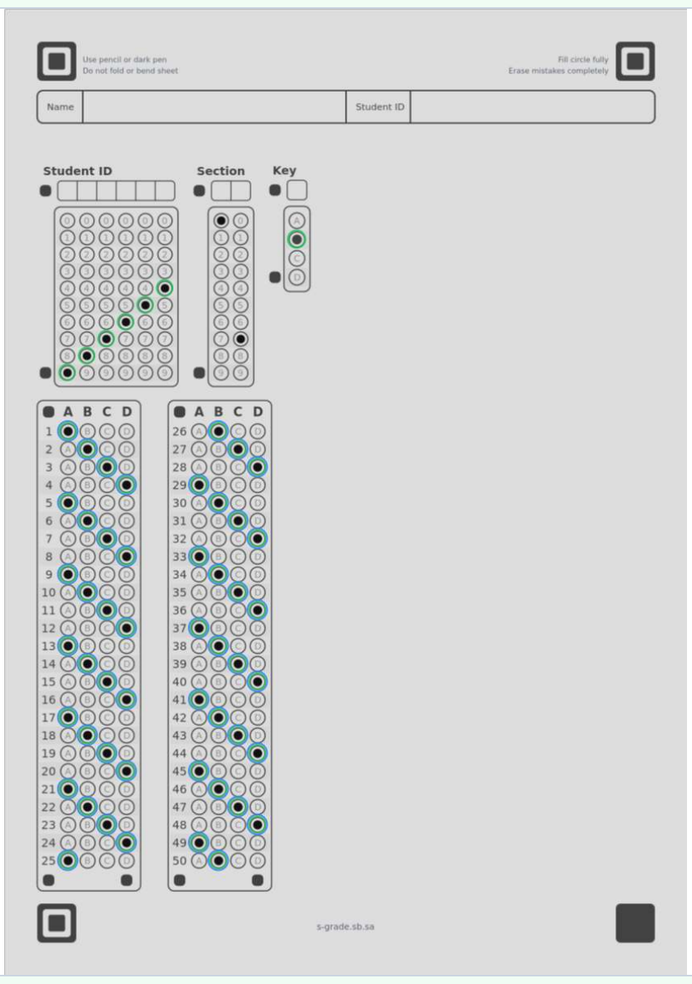
result.json

50q · photocopy-of-a-photocopy PASS

profile: `pristine` · 574 passed · 0 failed







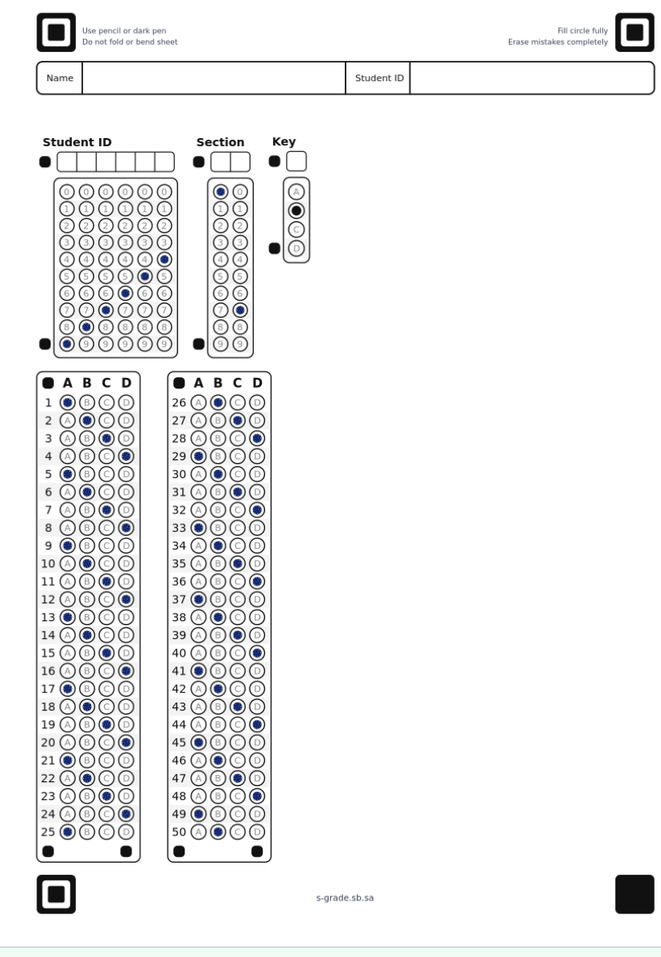
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

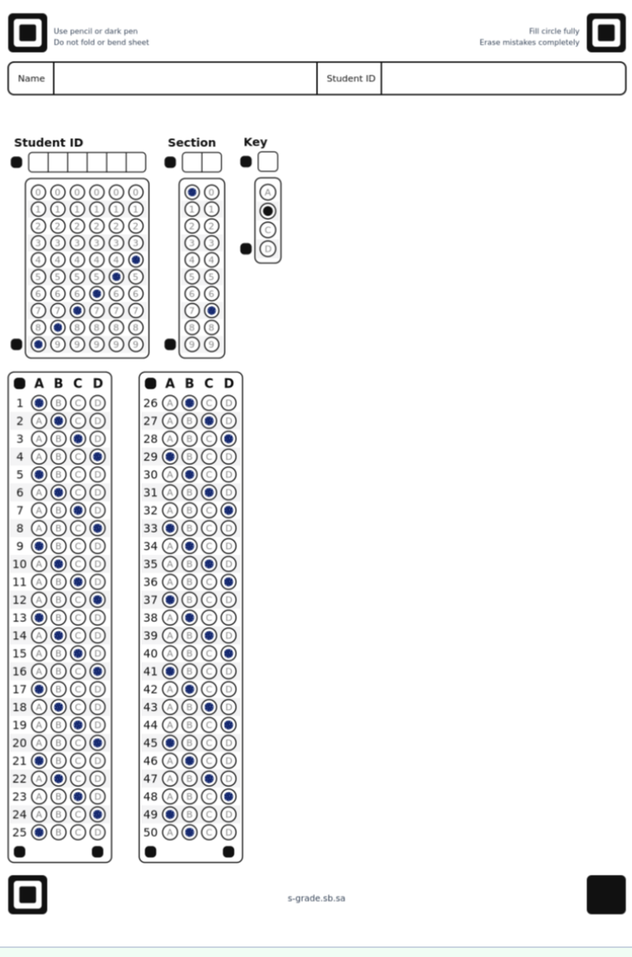
result.json

50q · ballpoint pen fill PASS

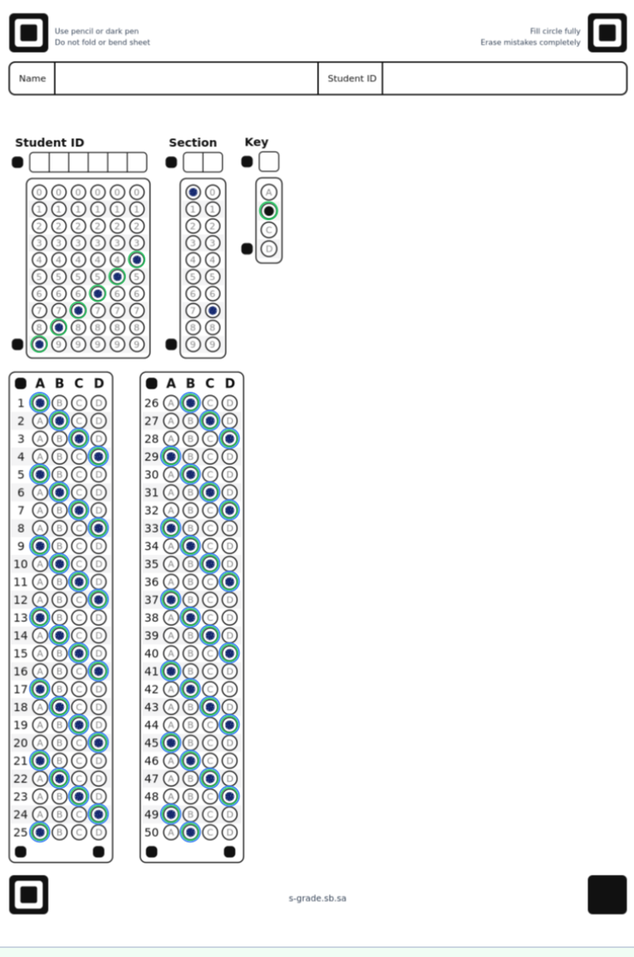
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



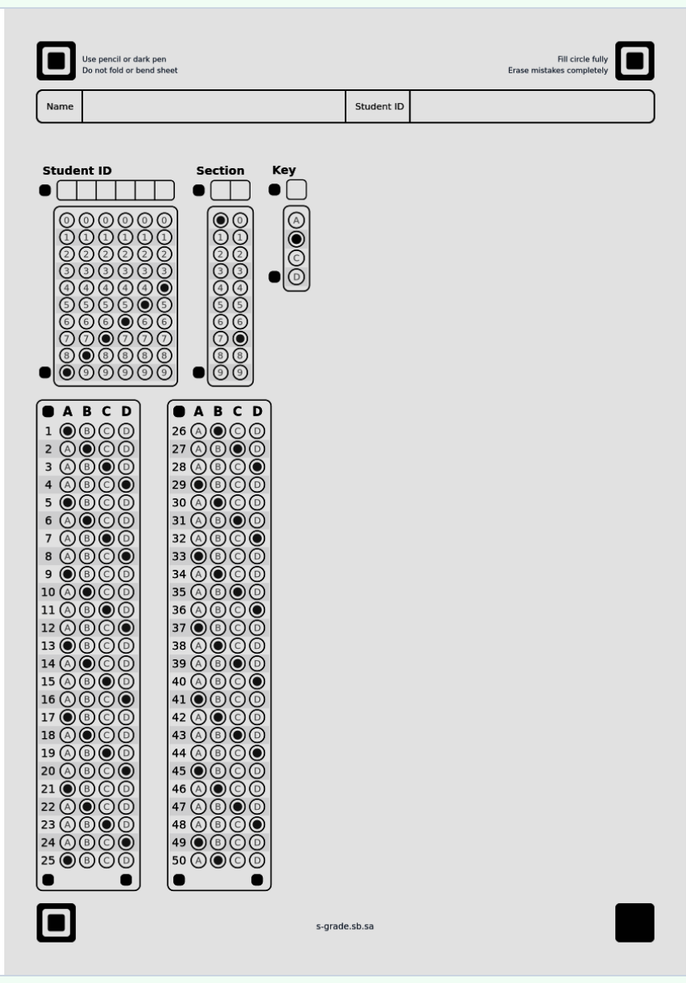
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

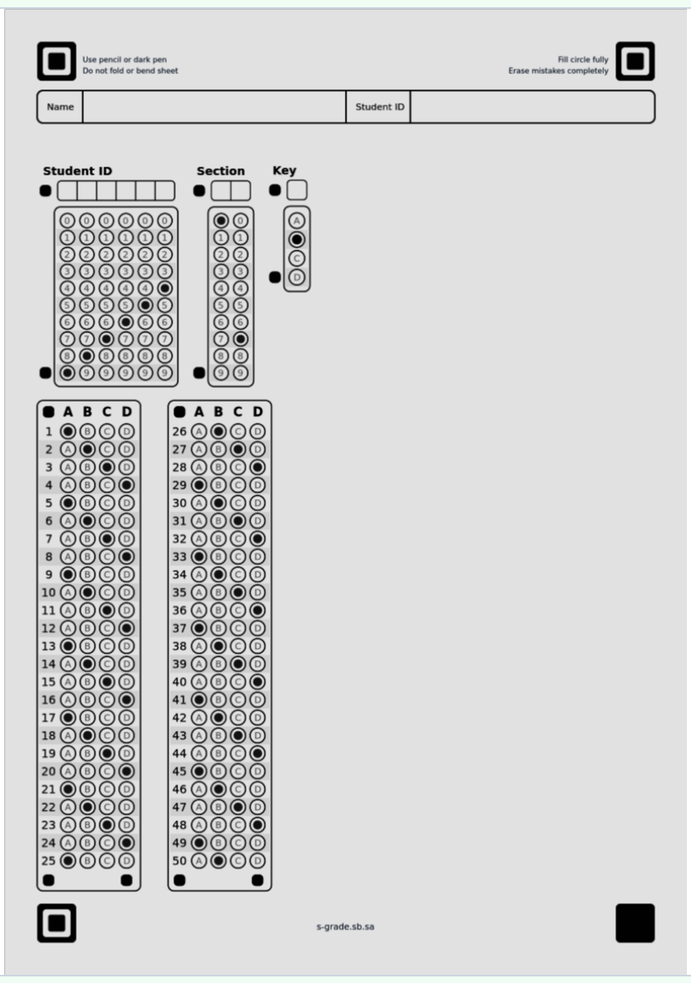
result.json

50q · ink bleed (over-dark print) PASS

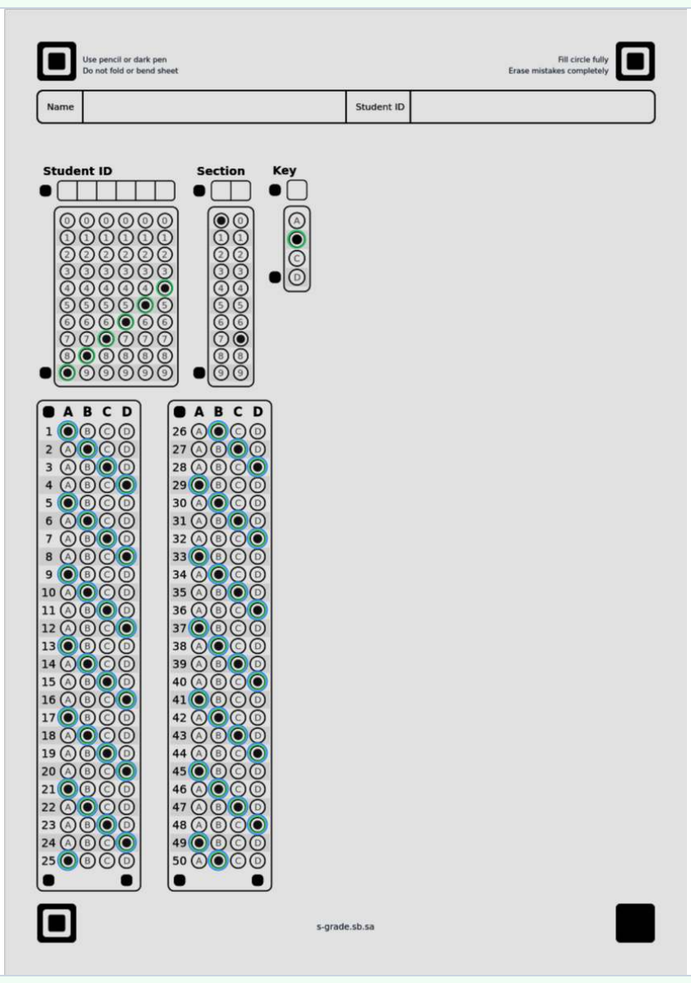
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



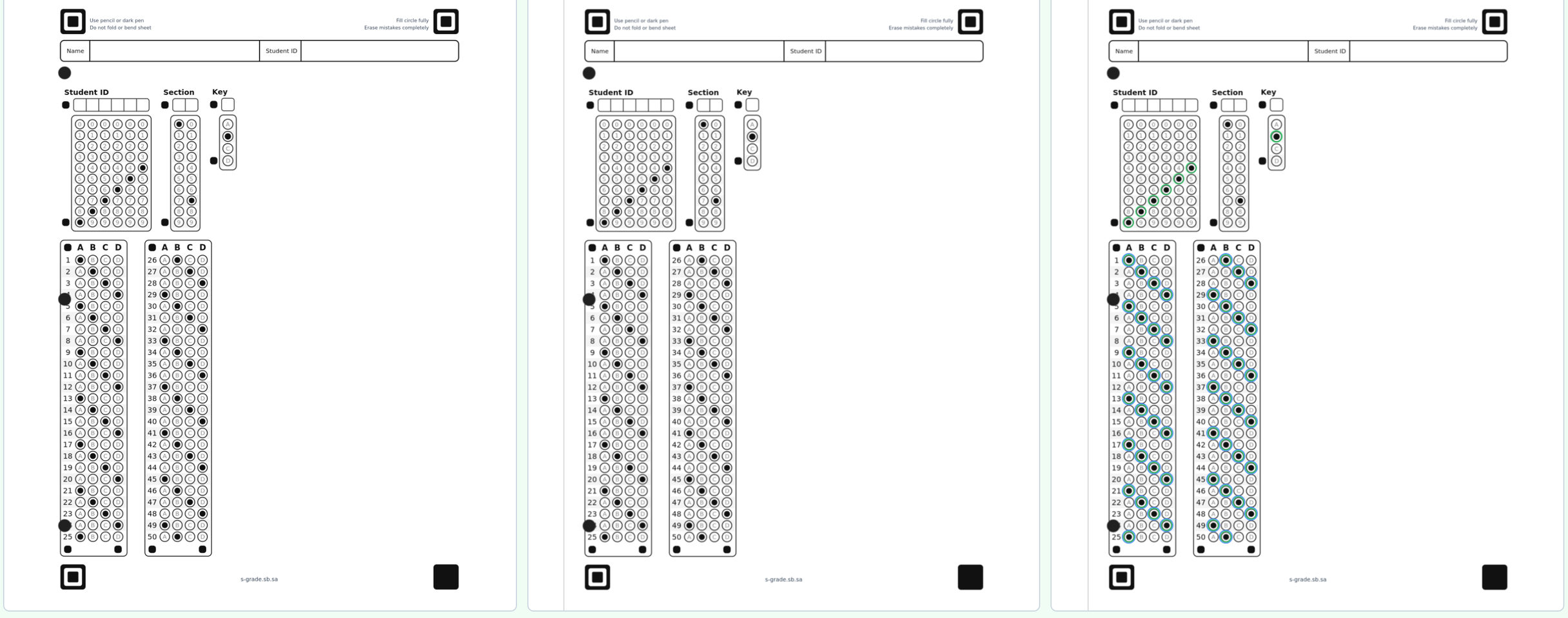
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · three-hole punch holes PASS

profile: `three_hole_punch` · 574 passed · 0 failed



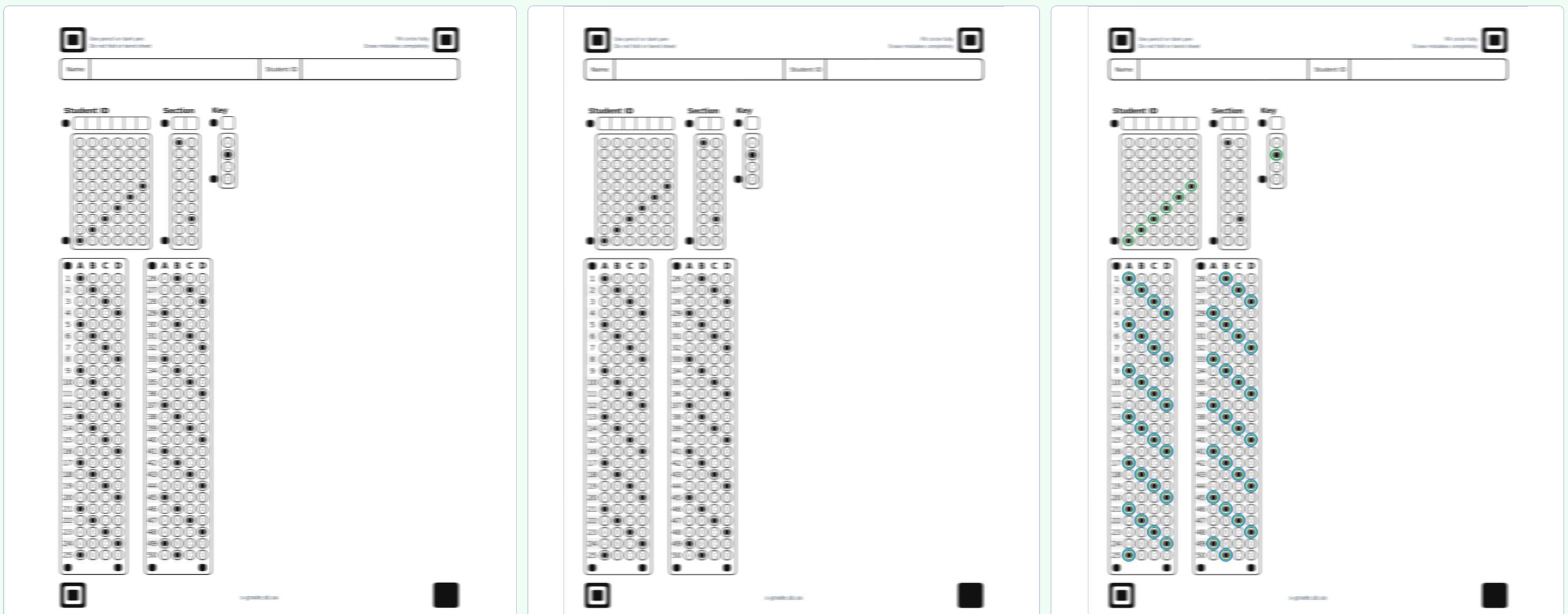
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · motion blur (horizontal) PASS

profile: `motion_blur` · 574 passed · 0 failed



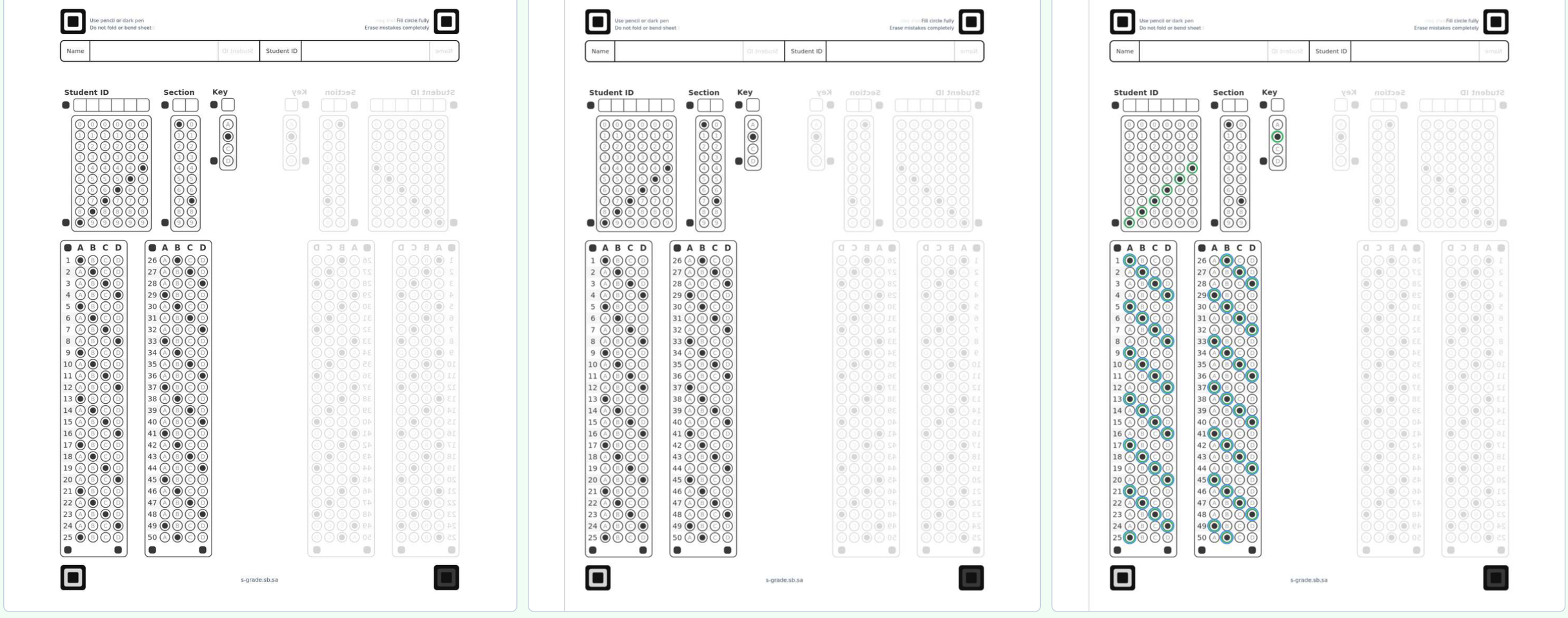
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · show-through from back of sheet PASS

profile: `show_through` · 574 passed · 0 failed



INPUT

WARPED

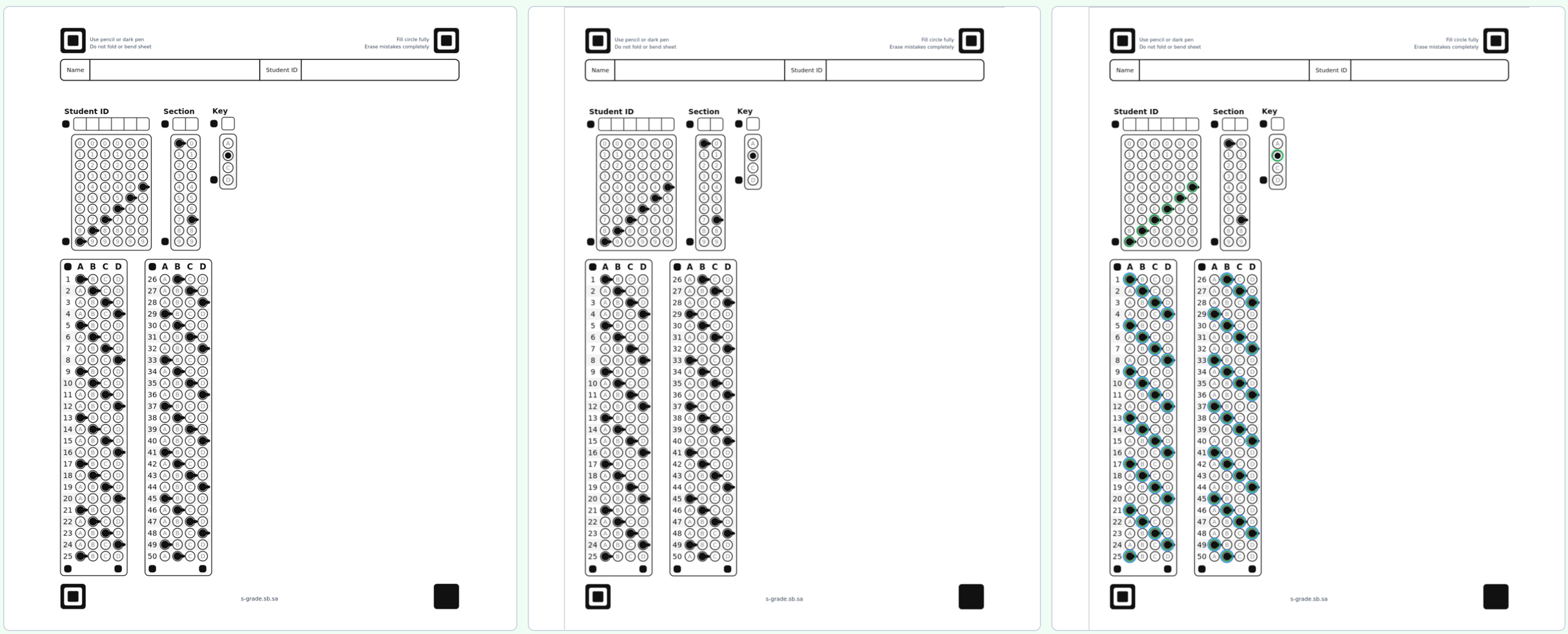
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · over-fill bleed past edge PASS

profile: `pristine` · 574 passed · 0 failed



INPUT

WARPED

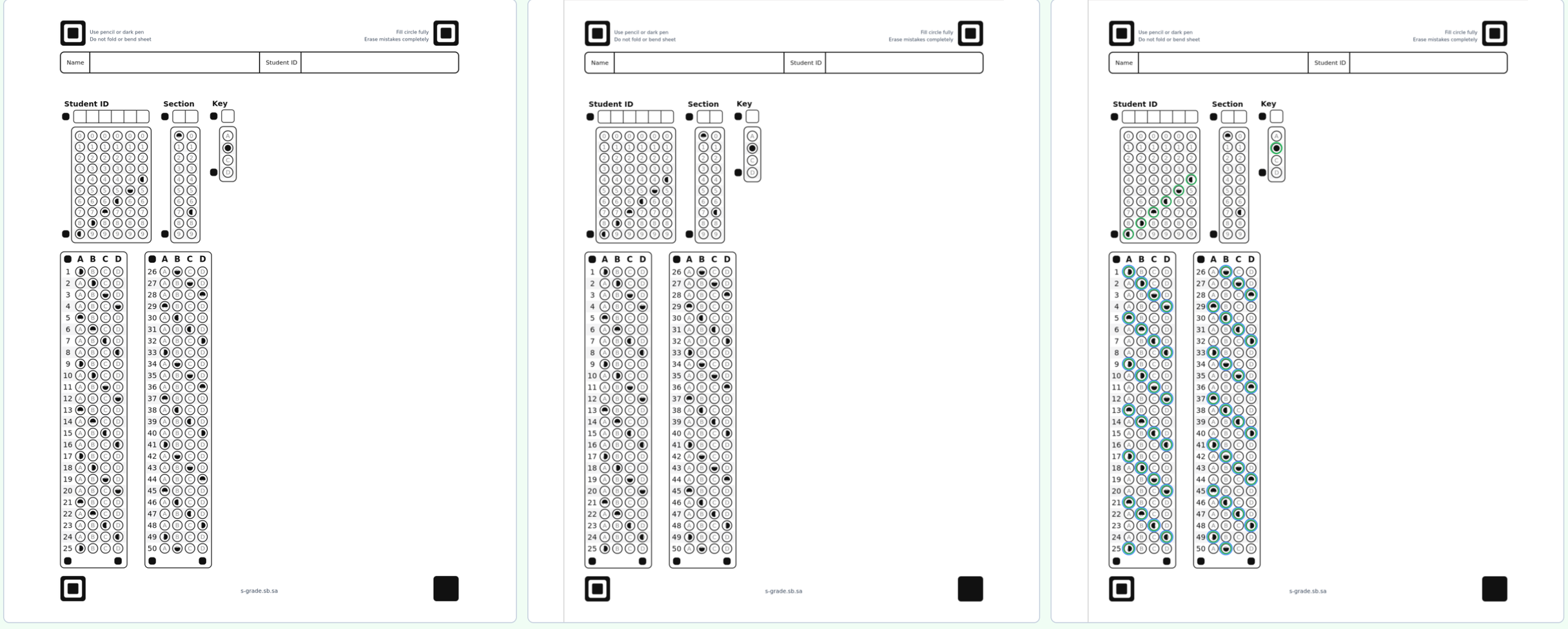
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · partial (under-) fill PASS

profile: `pristine` · 574 passed · 0 failed



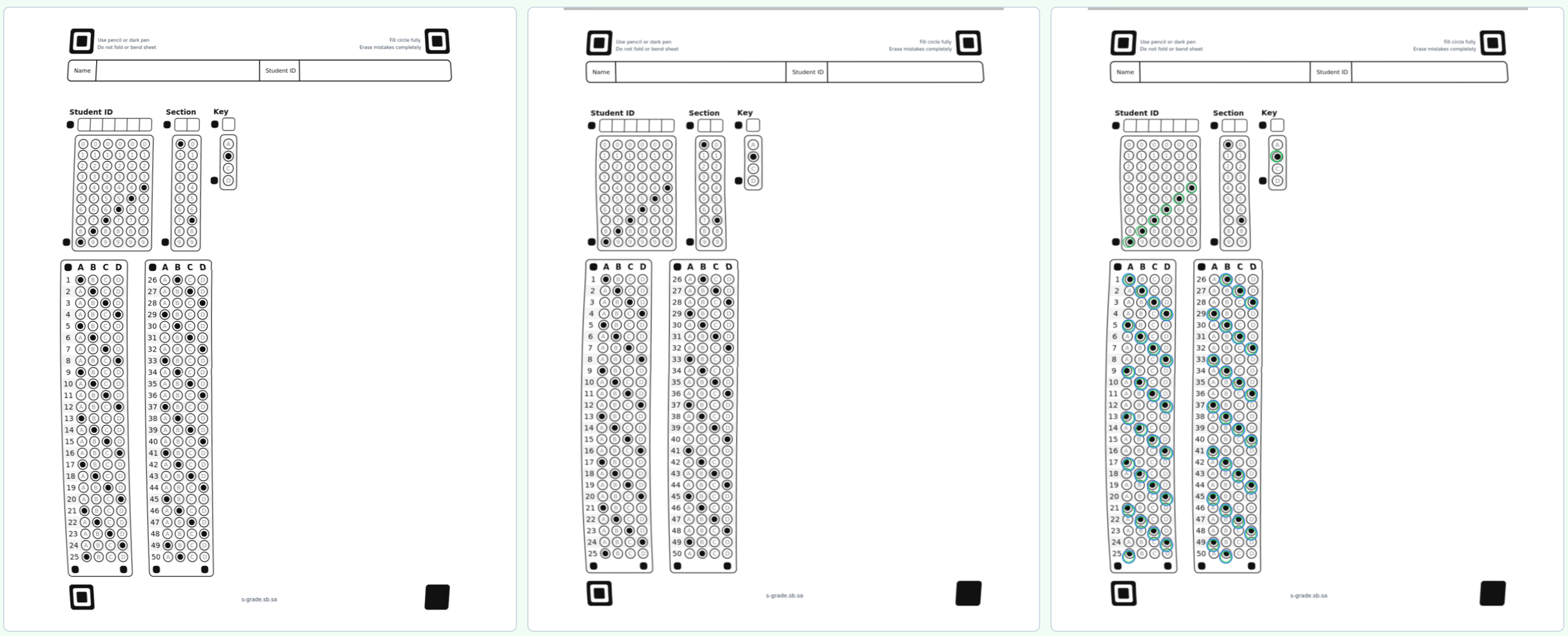
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · curled page (non-planar) PASS

profile: `curled_page` · 574 passed · 0 failed



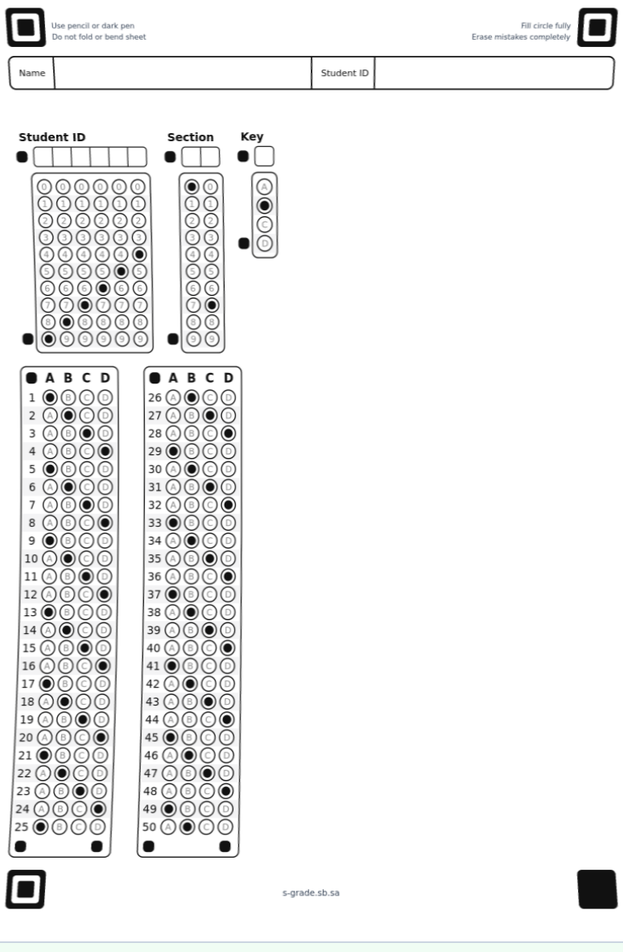
INPUT WARPED OVERLAY

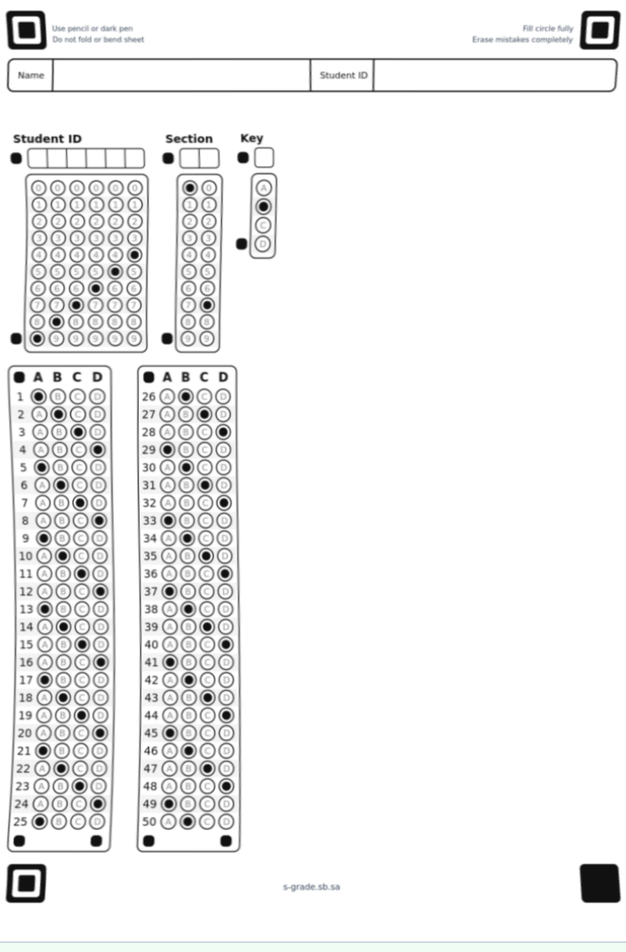
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

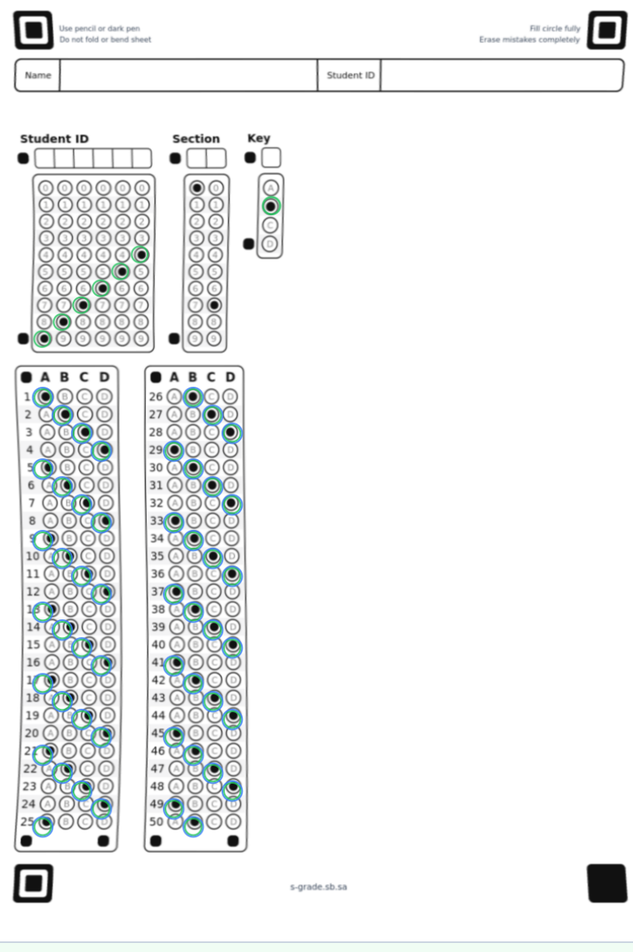
result.json

50q · curled page convex (bulged) PASS

profile: `curled_page_convex` · 574 passed · 0 failed







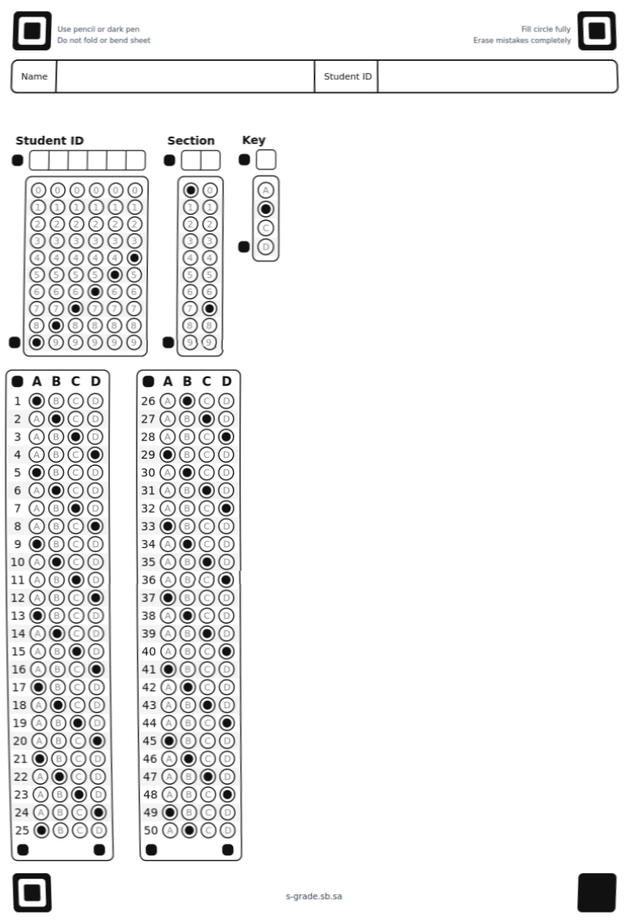
INPUT WARPED OVERLAY

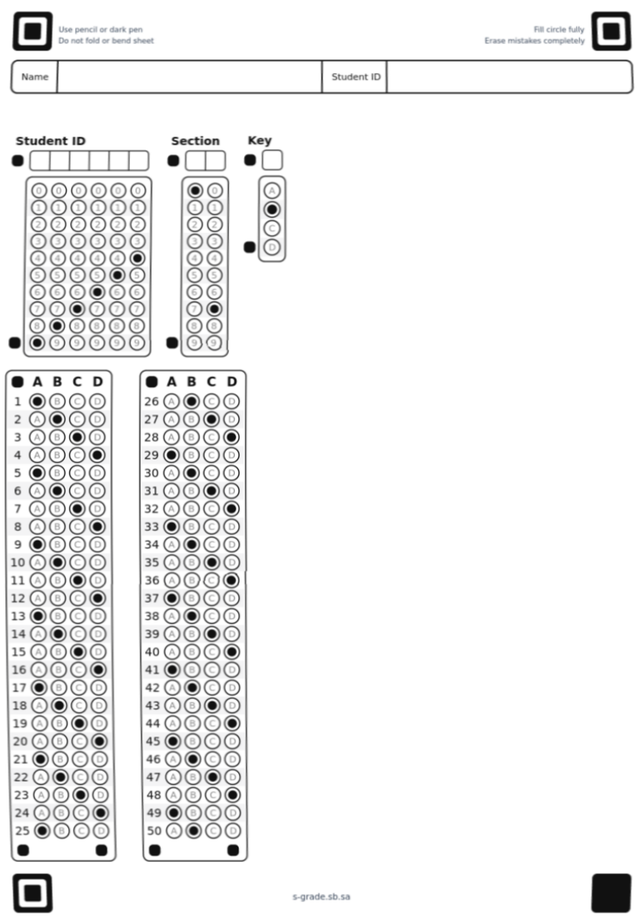
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

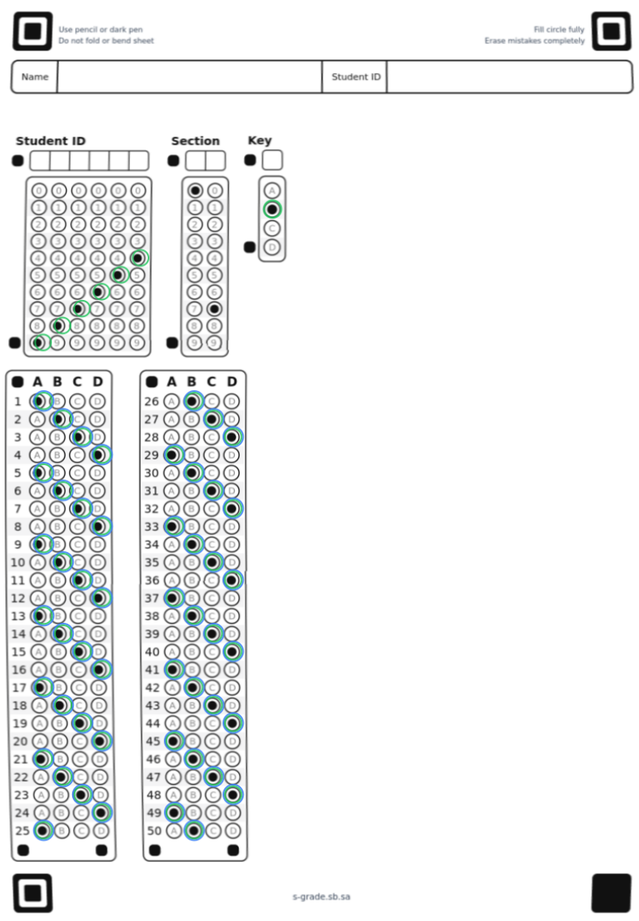
result.json

50q · curled page MILD (lying on soft surface) PASS

profile: `curled_page_mild` · 574 passed · 0 failed







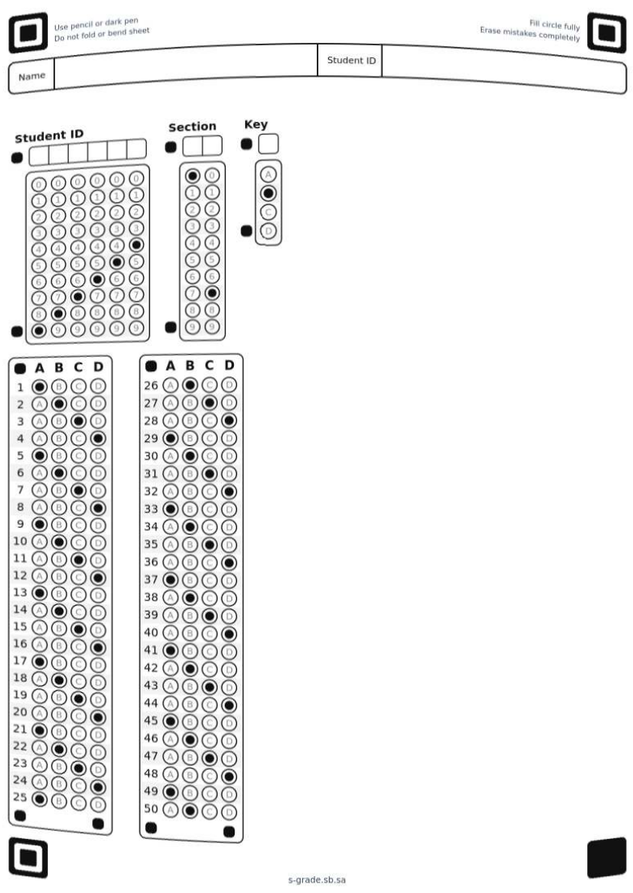
INPUT WARPED OVERLAY

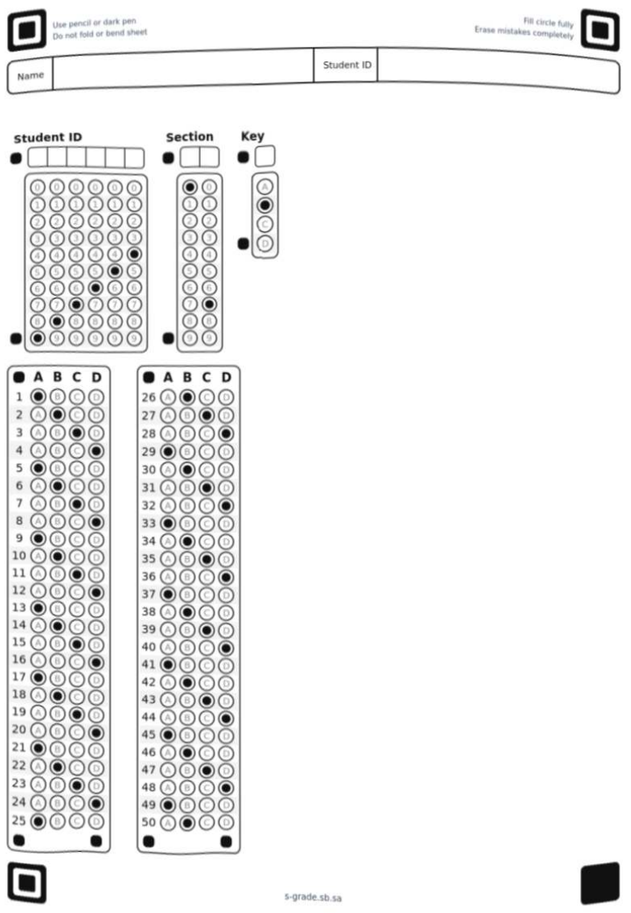
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

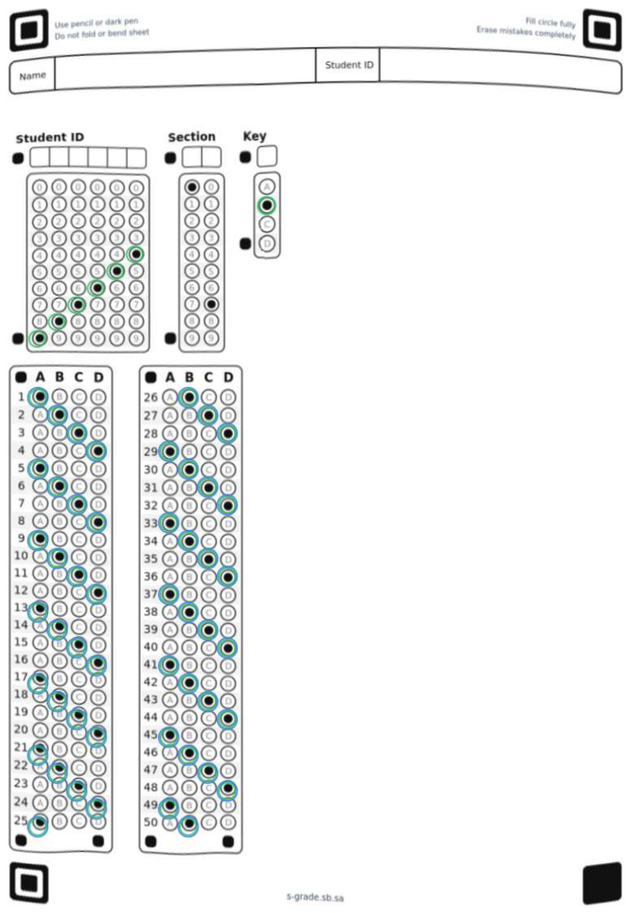
result.json

50q · curled page horizontal axis PASS

profile: `curled_page_horizontal` · 574 passed · 0 failed







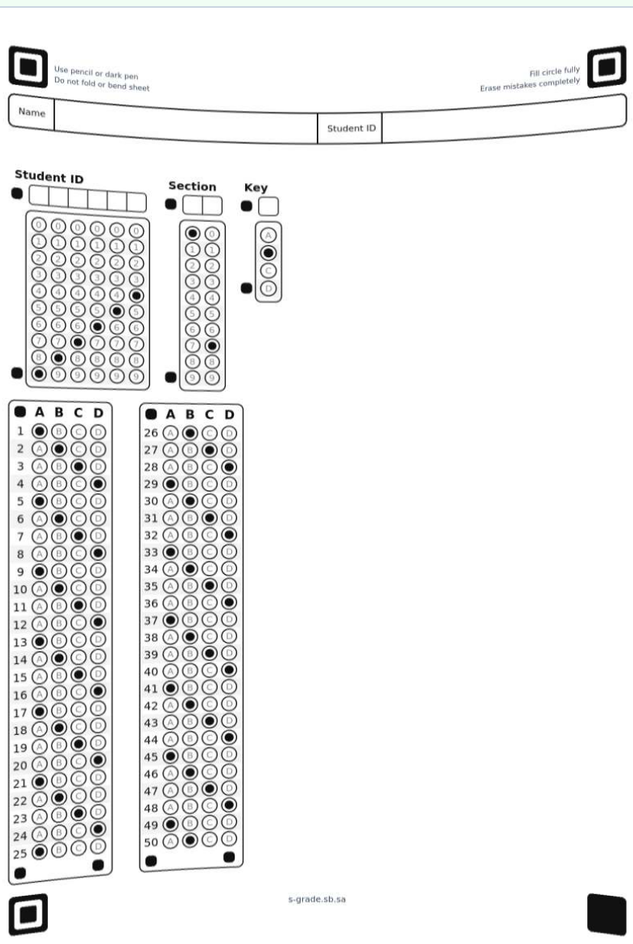
INPUT WARPED OVERLAY

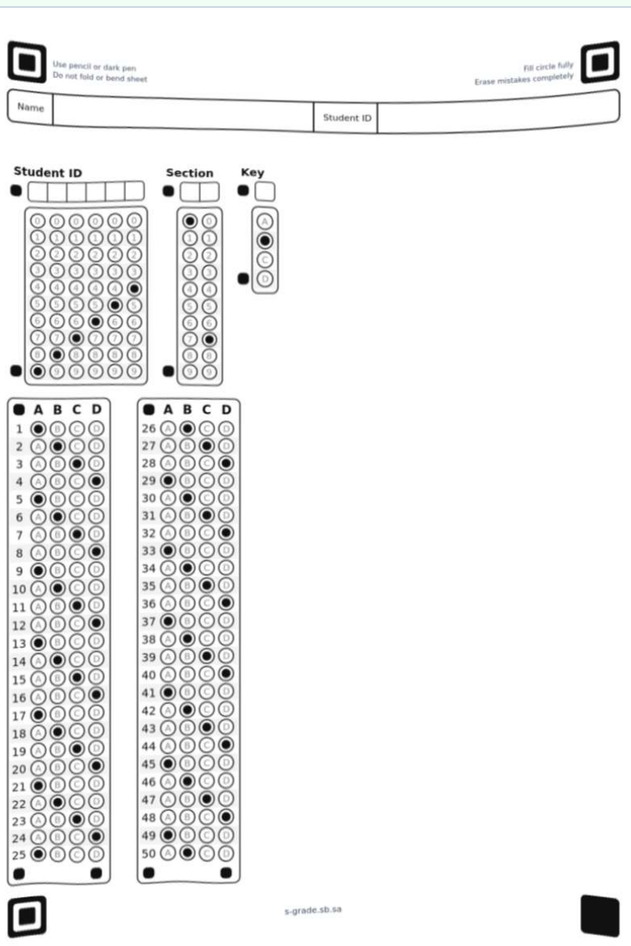
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

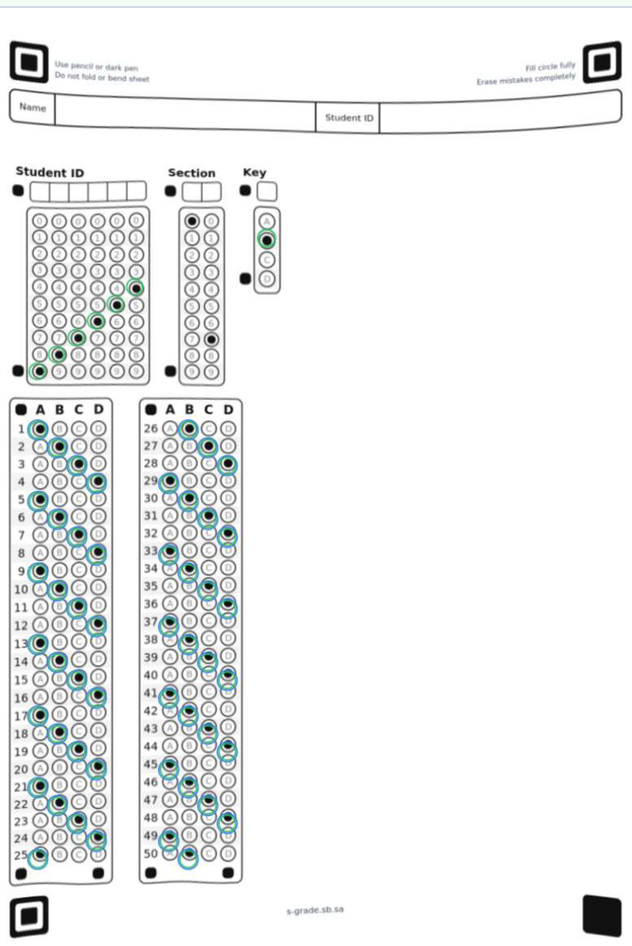
result.json

50q · curled page horizontal axis (convex) PASS

profile: `curled_page_horizontal_convex` · 574 passed · 0 failed







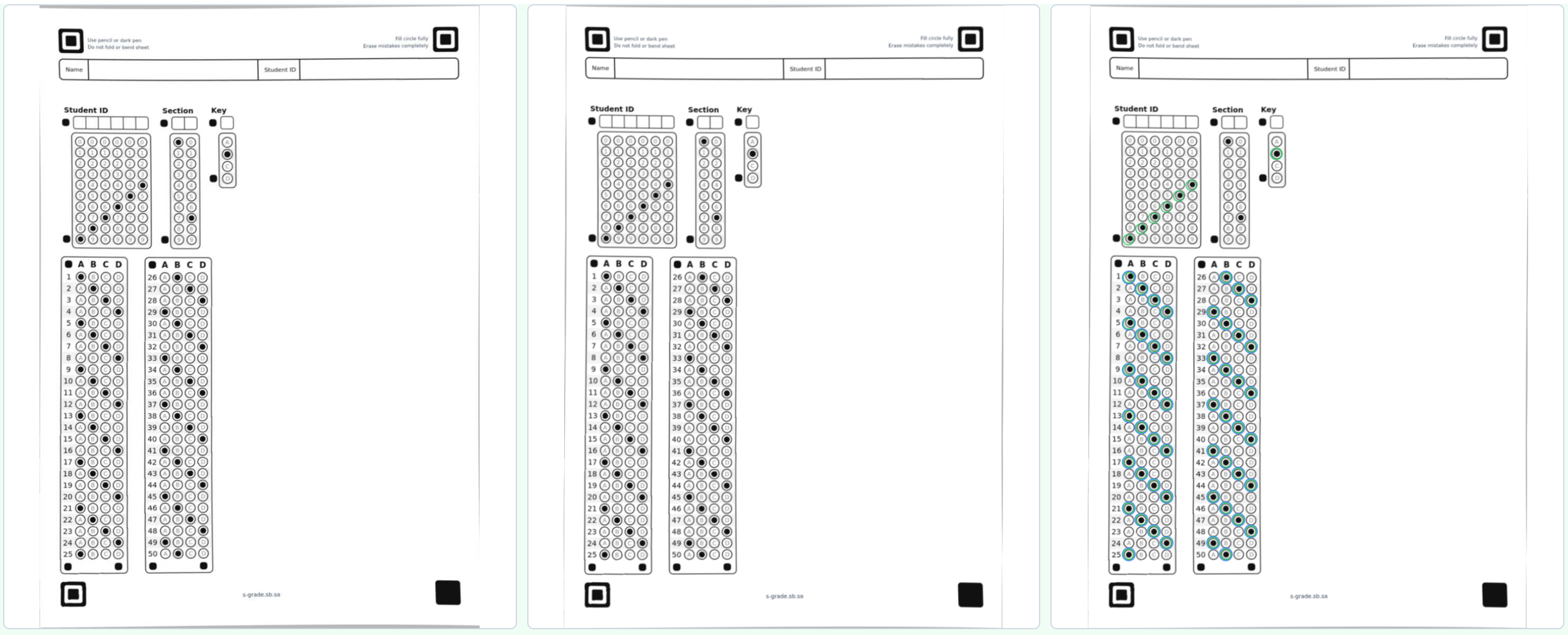
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · curled page diagonal axis PASS

profile: `curled_page_diagonal` · 574 passed · 0 failed



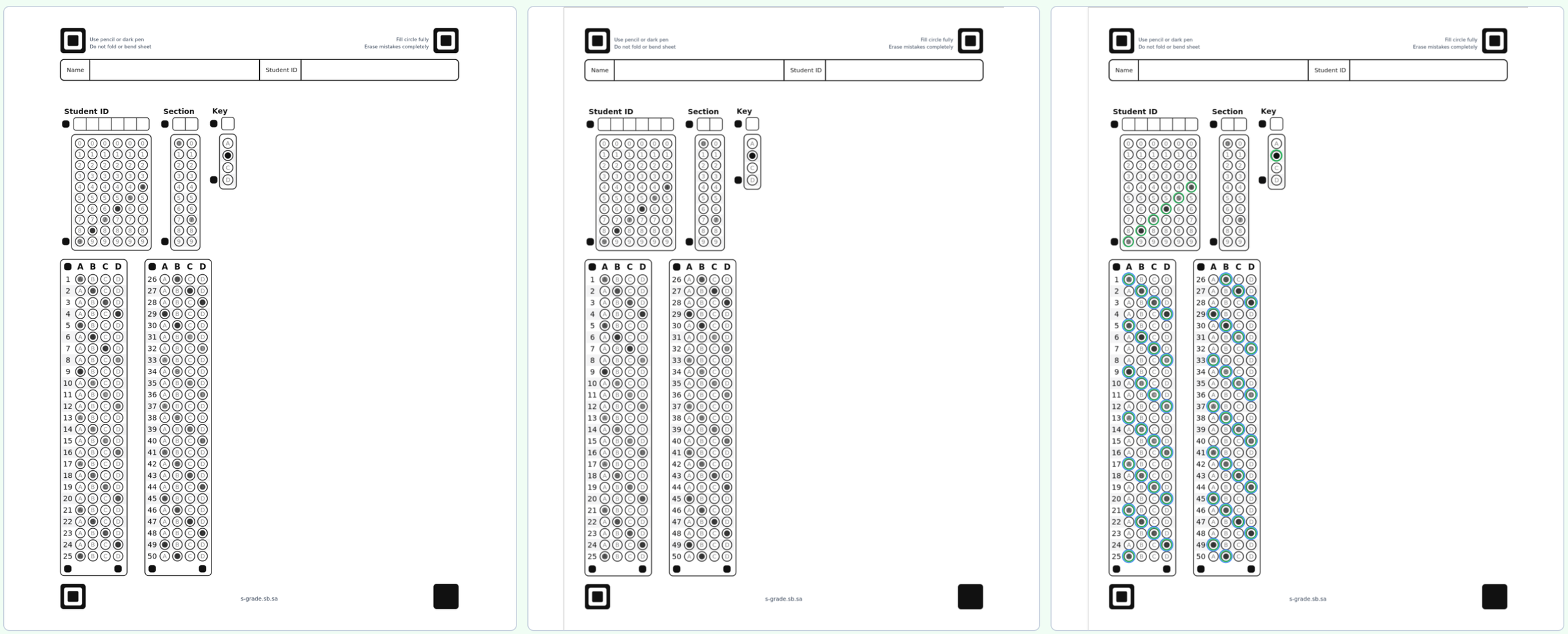
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · mixed pencil darkness PASS

profile: `pristine` · 574 passed · 0 failed



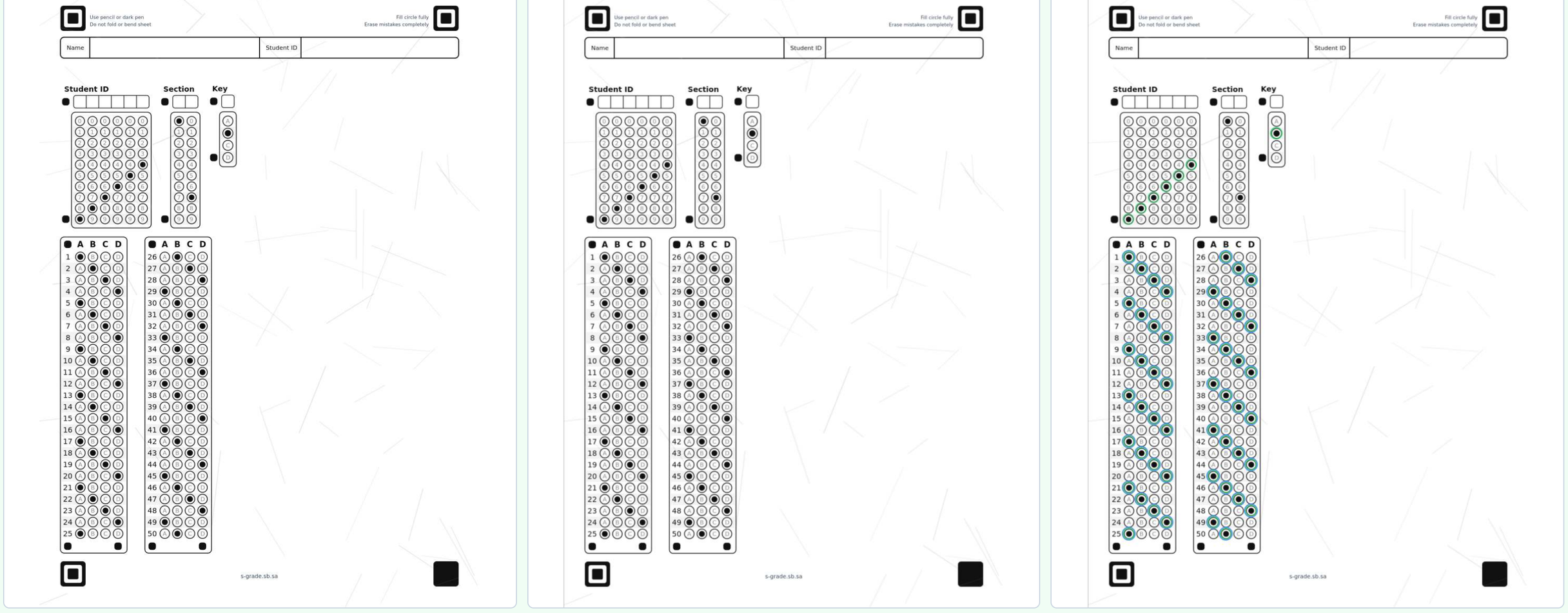
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · wrinkled / crumpled sheet PASS

profile: `wrinkled` · 574 passed · 0 failed



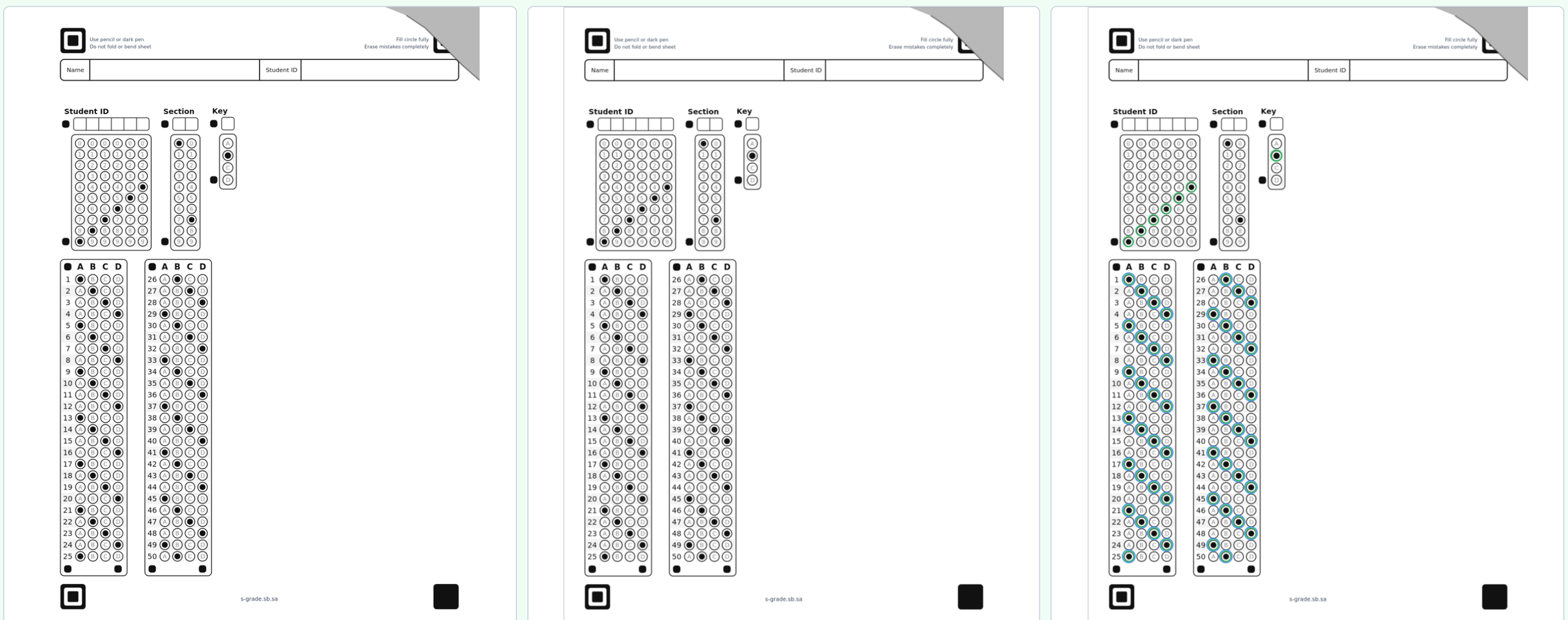
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · torn corner (TR fiducial missing) PASS

profile: `torn_corner_tr` · 574 passed · 0 failed



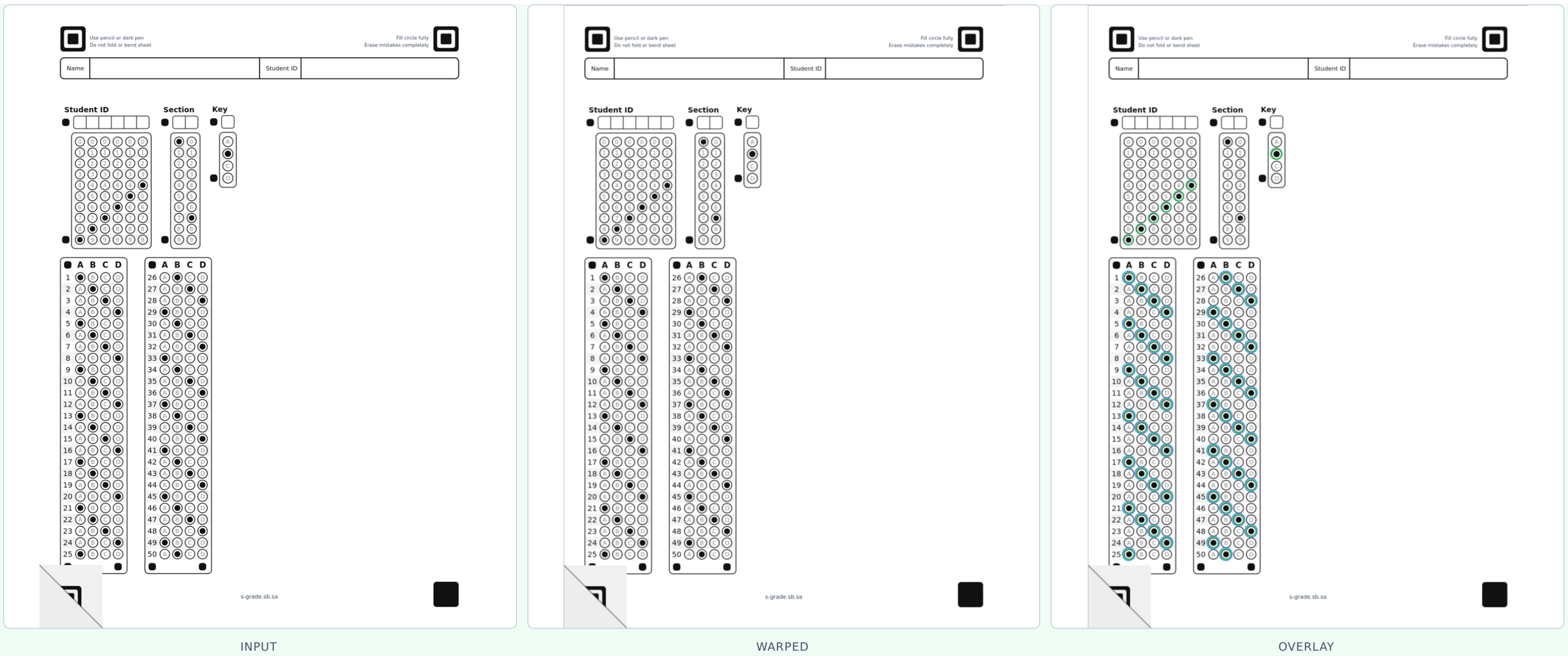
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · dog-eared corner (BL) PASS

profile: `dog_eared_bl` · 574 passed · 0 failed



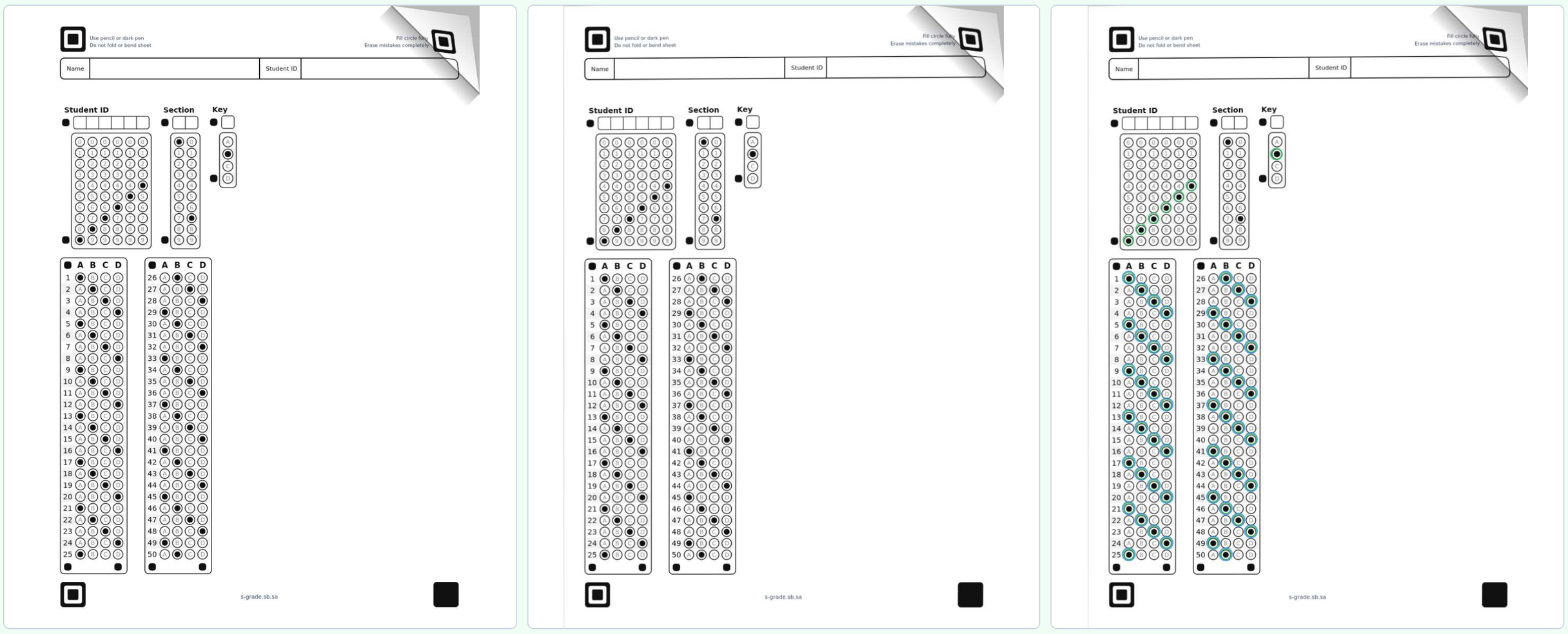
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · bent corner (TR, mild) PASS

profile: `bent_corner_tr` · 574 passed · 0 failed



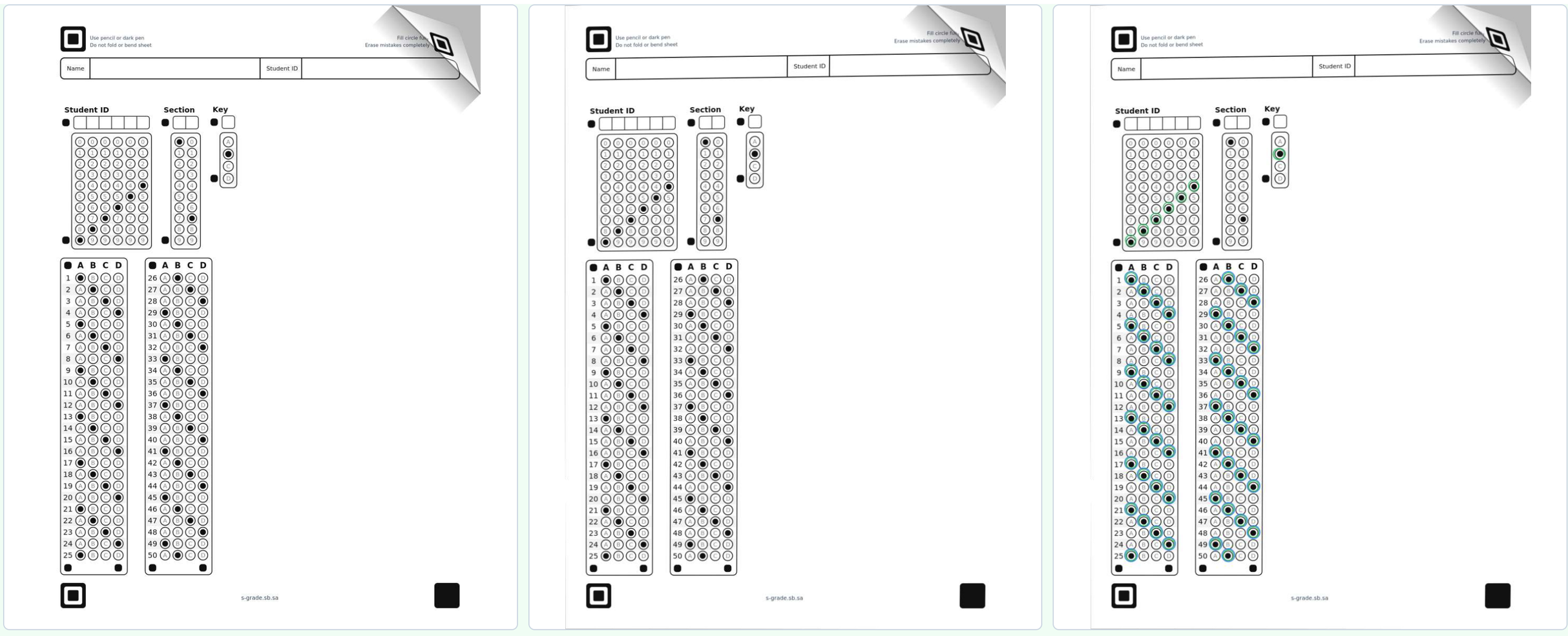
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · bent corner (TR, strong) PASS

profile: `bent_corner_tr_strong` · 574 passed · 0 failed



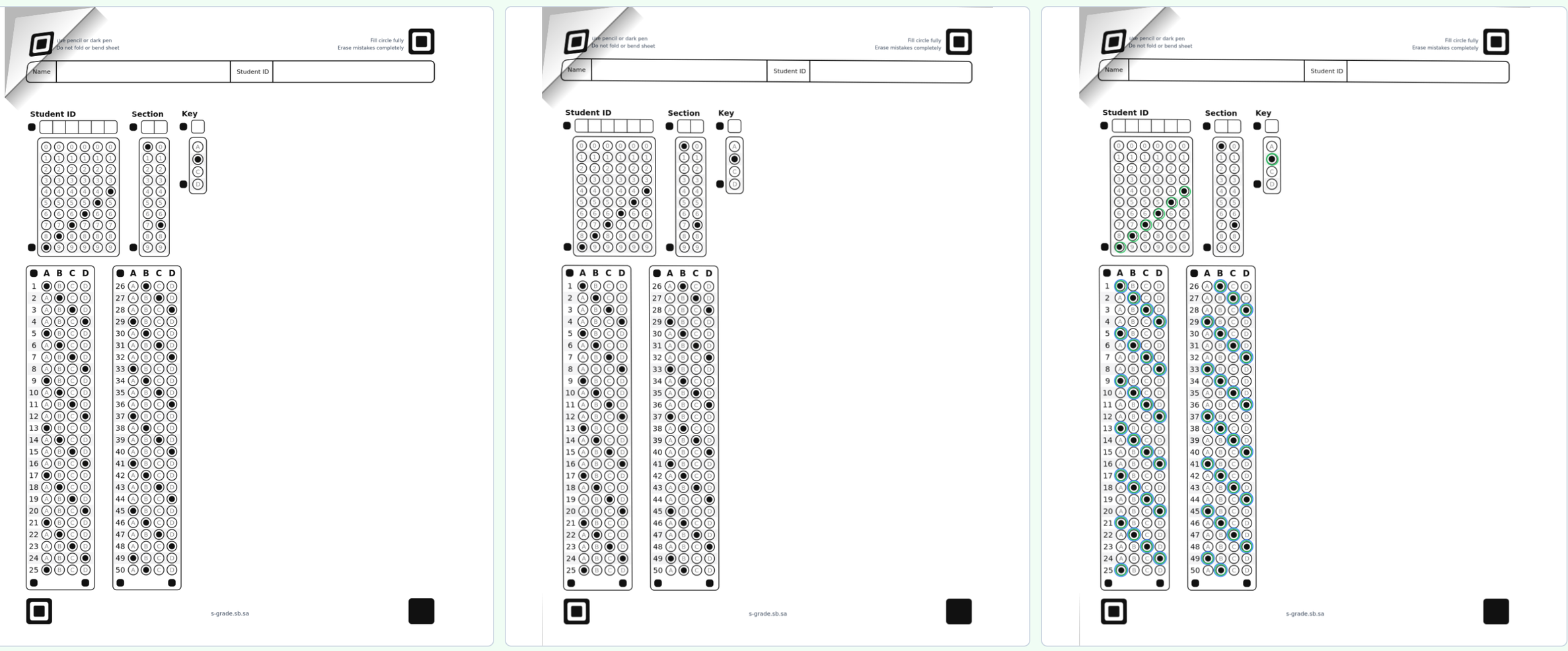
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · bent corner (TL, mild) PASS

profile: `bent_corner_tl` · 574 passed · 0 failed



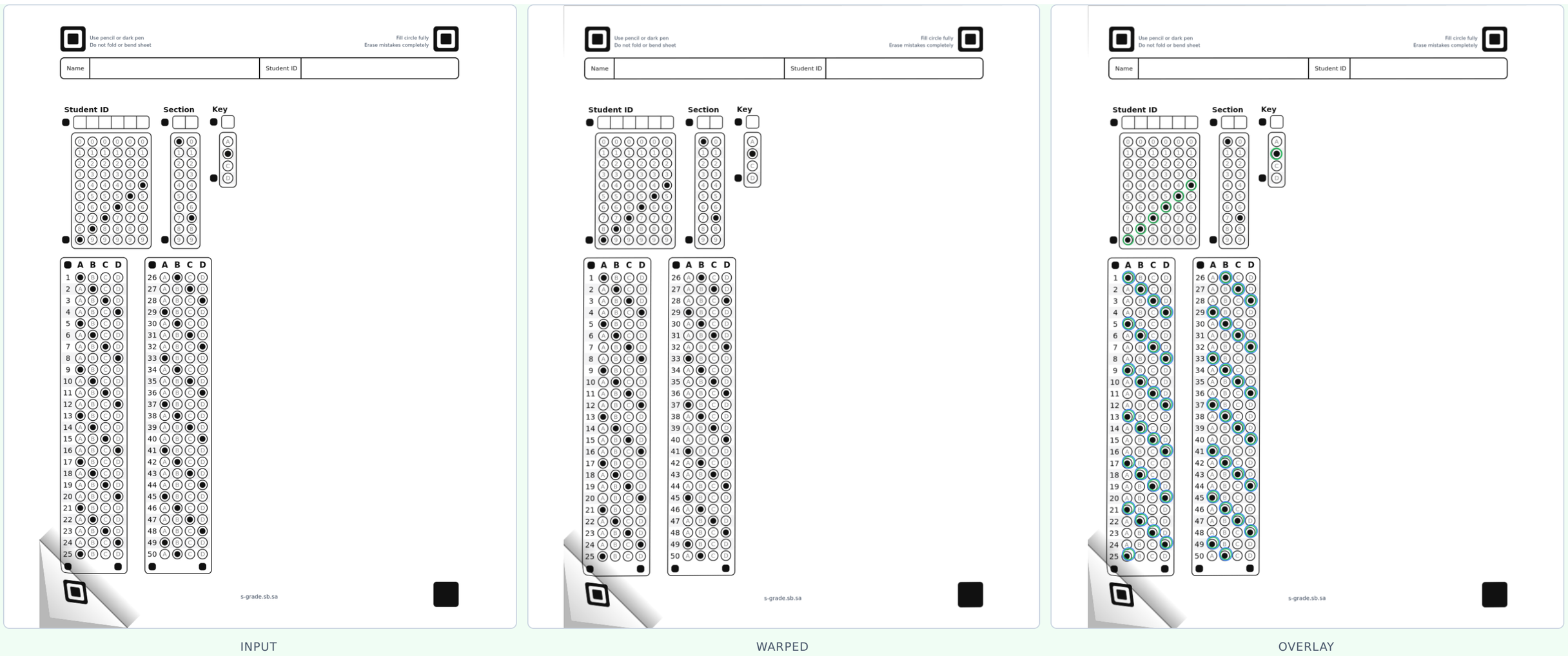
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · bent corner (BL, mild) PASS

profile: `bent_corner_bl` · 574 passed · 0 failed



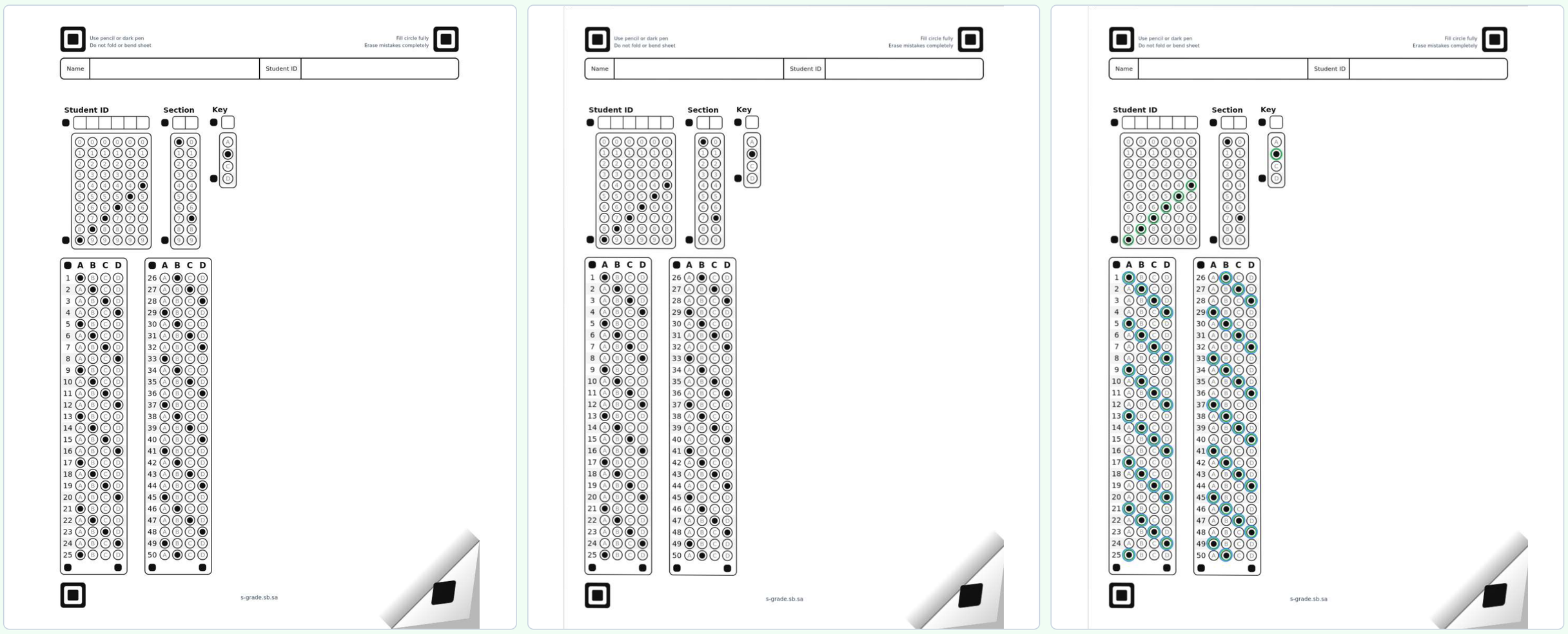
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · bent corner (BR, mild) PASS

profile: `bent_corner_br` · 574 passed · 0 failed



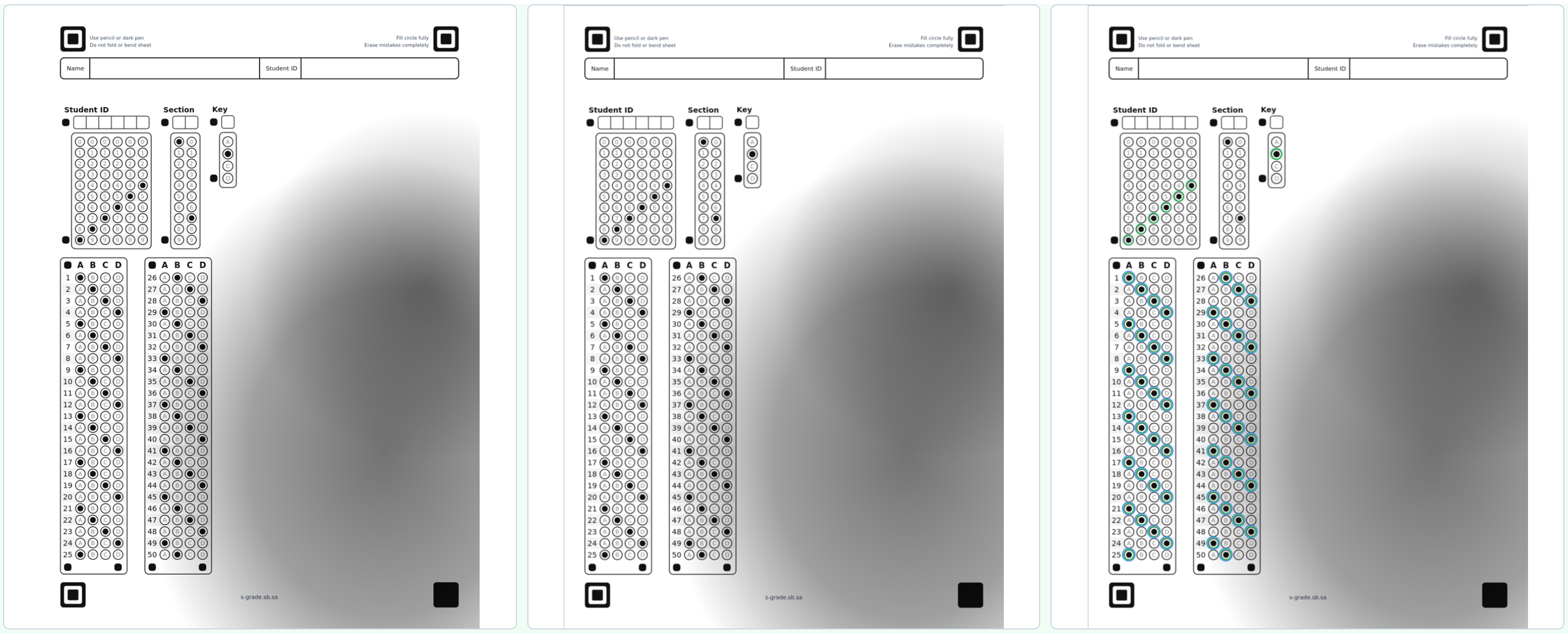
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · hand / arm shadow draped over sheet PASS

profile: `hand_shadow` · 574 passed · 0 failed



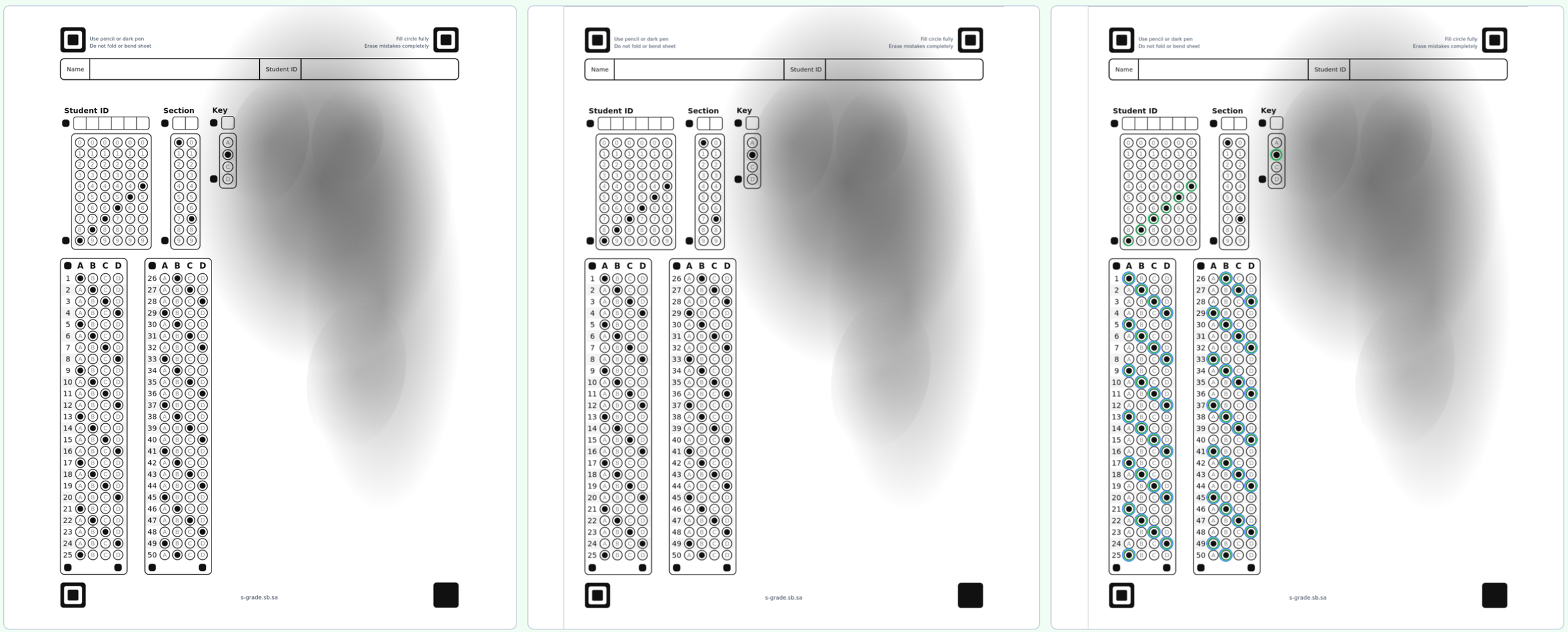
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · partial bubble-area shadow (filled rows stay clear) PASS

profile: `partial_bubble_shadow` · 574 passed · 0 failed



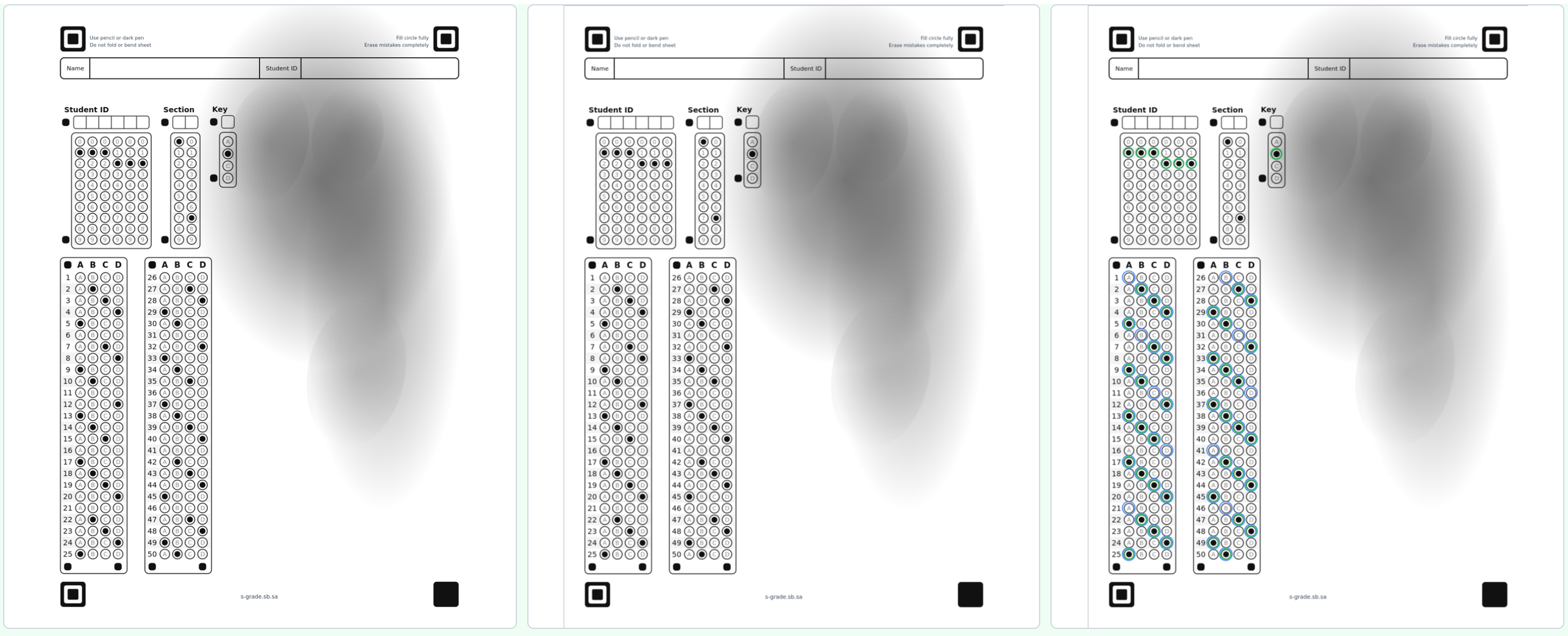
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · blank rows under partial bubble shadow stay blank PASS

profile: `partial_bubble_shadow` · 574 passed · 0 failed



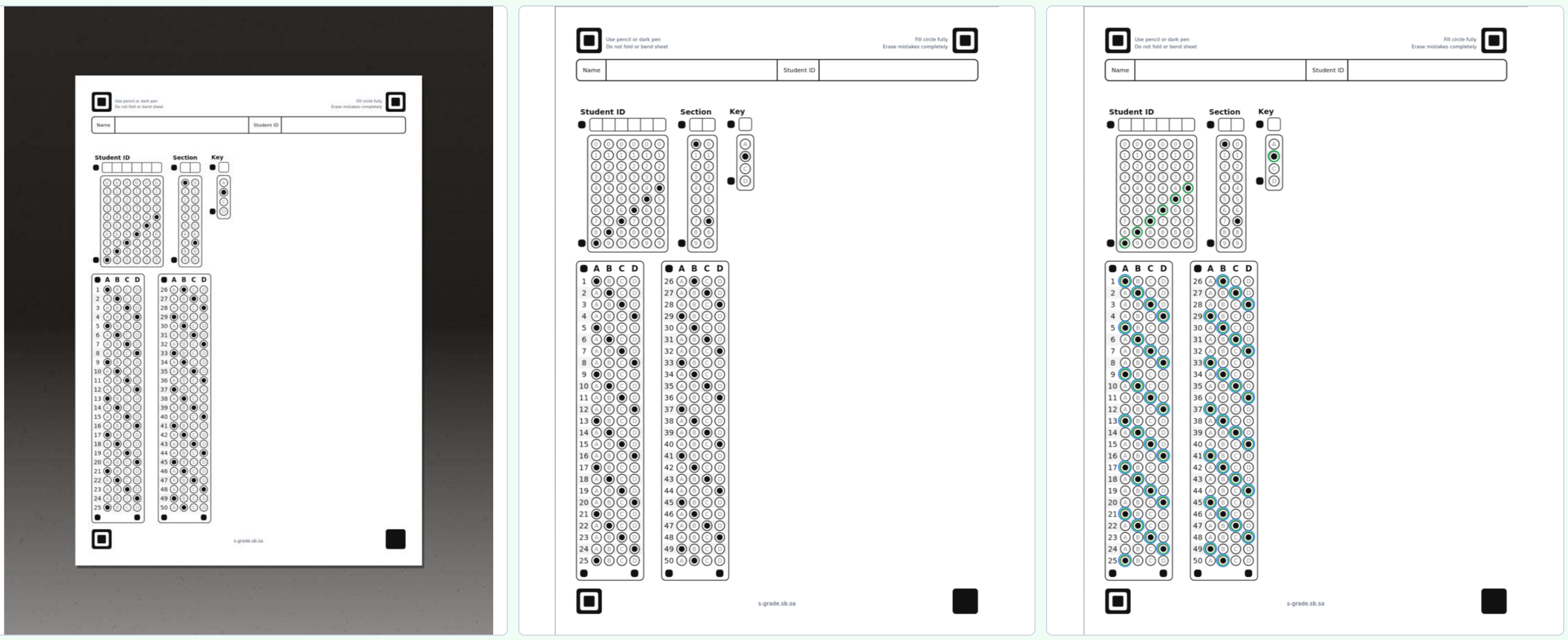
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

result.json

50q · sheet on dark fabric couch PASS

profile: `scene_fabric_couch` · 574 passed · 0 failed



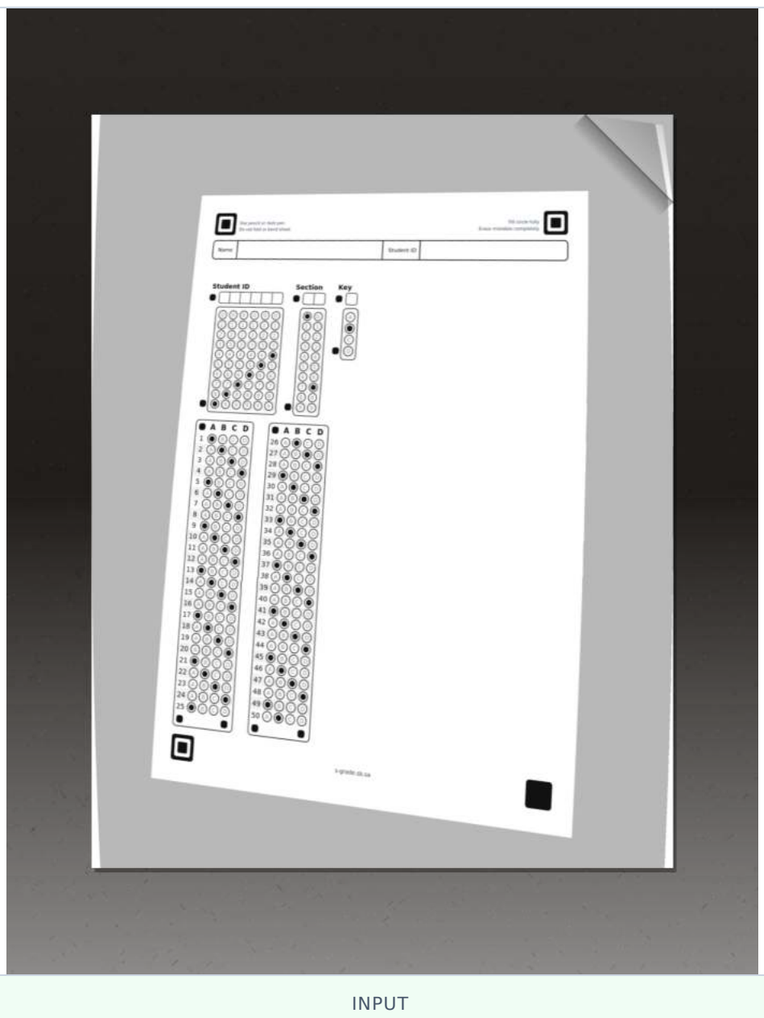
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

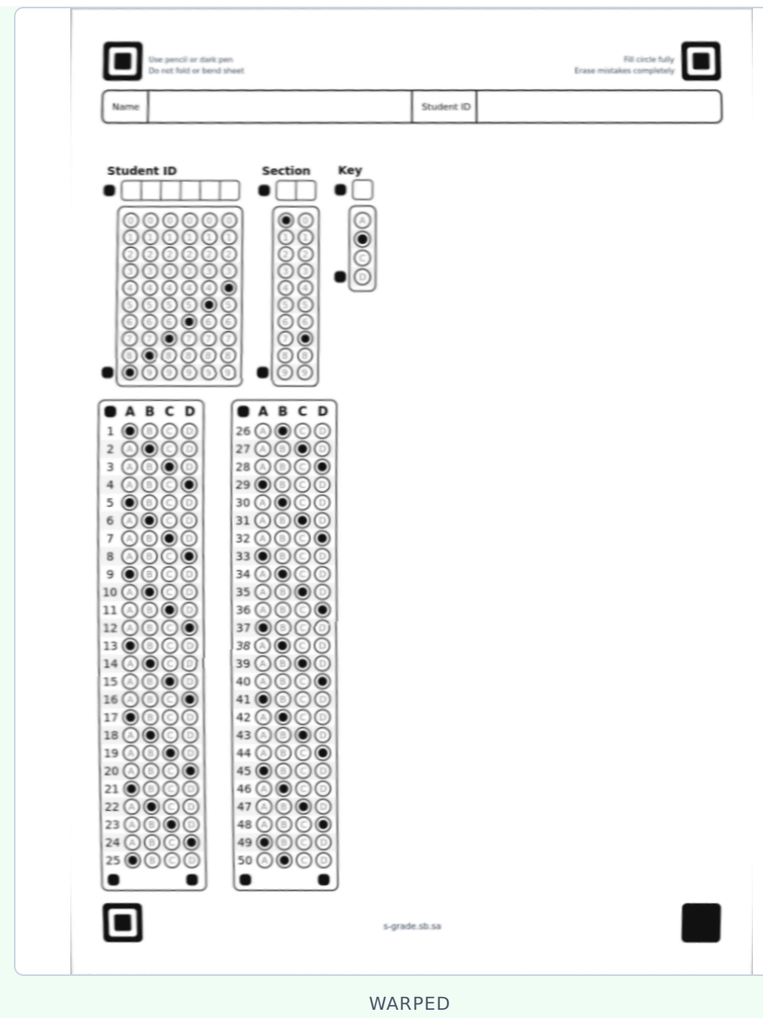
result.json

50q · real photo mimic 1: fabric couch + mild tilt + bent TR PASS

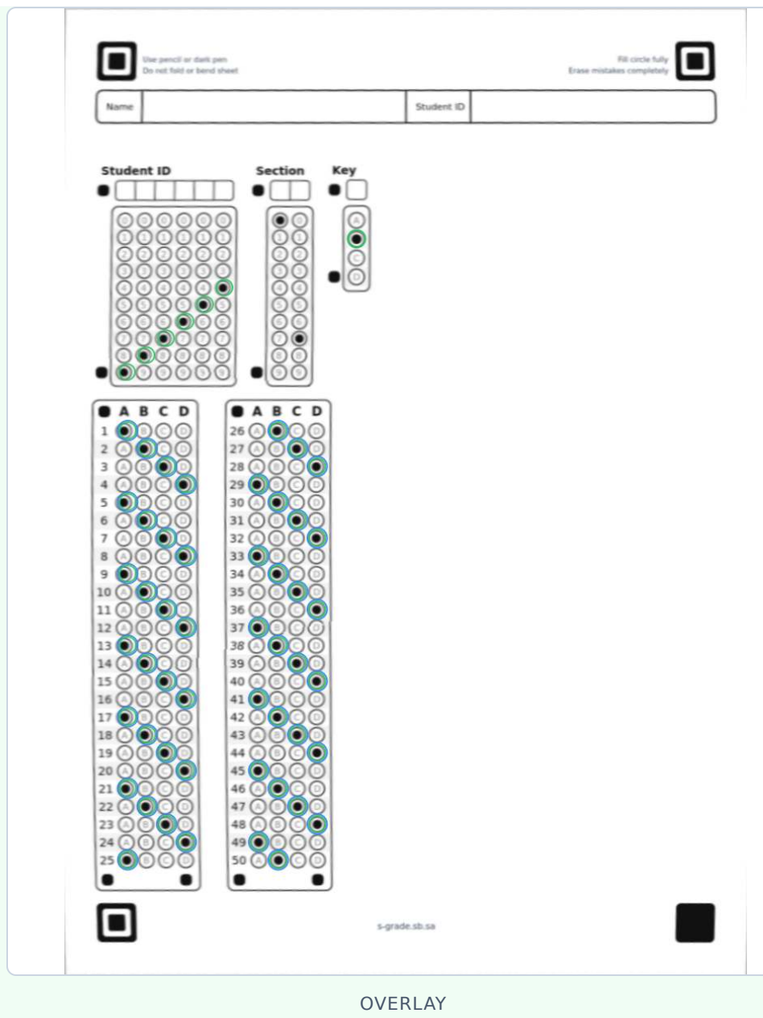
profile: `perspective_mild → rotated_3deg → curled_page_mild → bent_corner_tr → scene_fabric_couch` · 574 passed · 0 failed



INPUT



WARPED



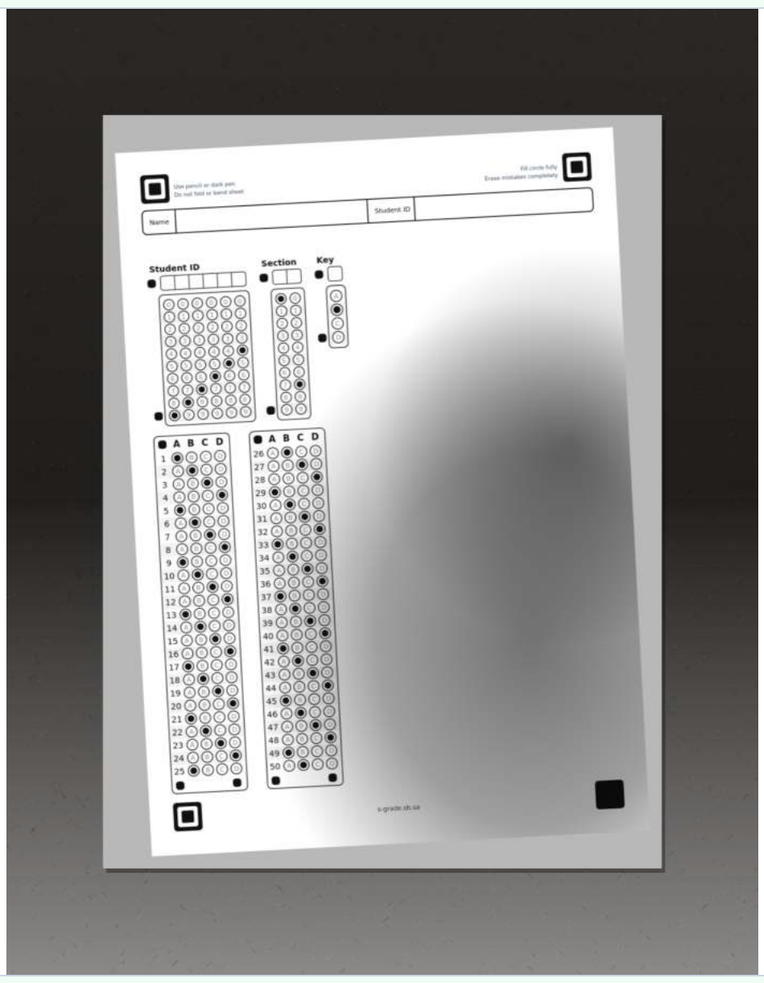
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

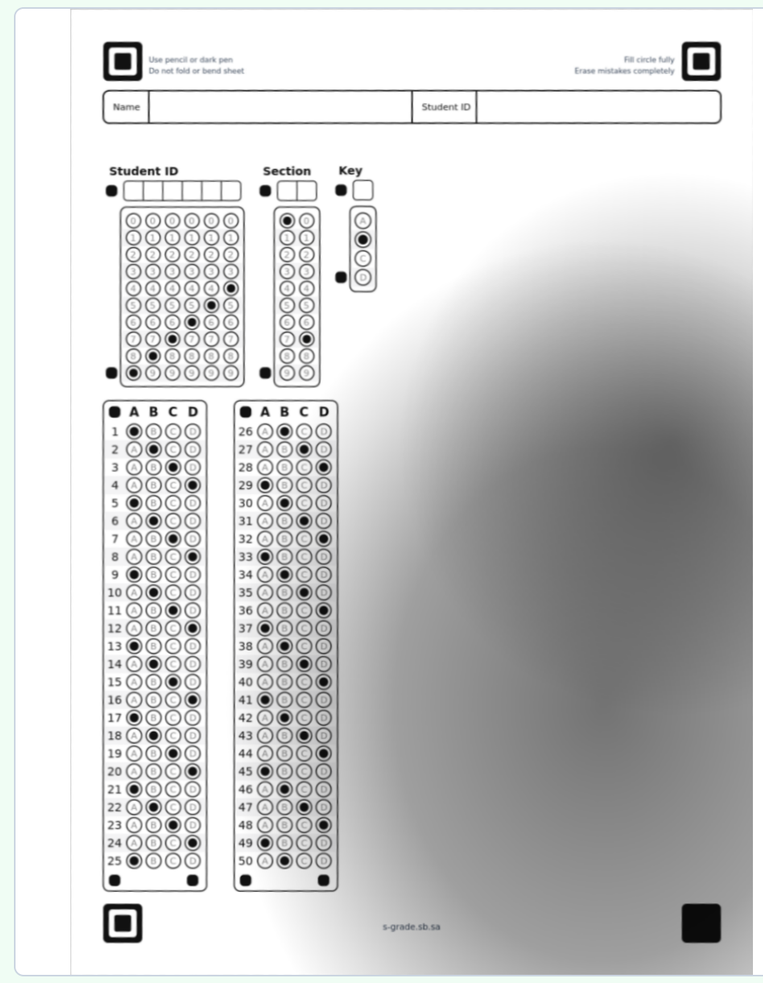
result.json

50q · real photo mimic 2: fabric couch + hand shadow PASS

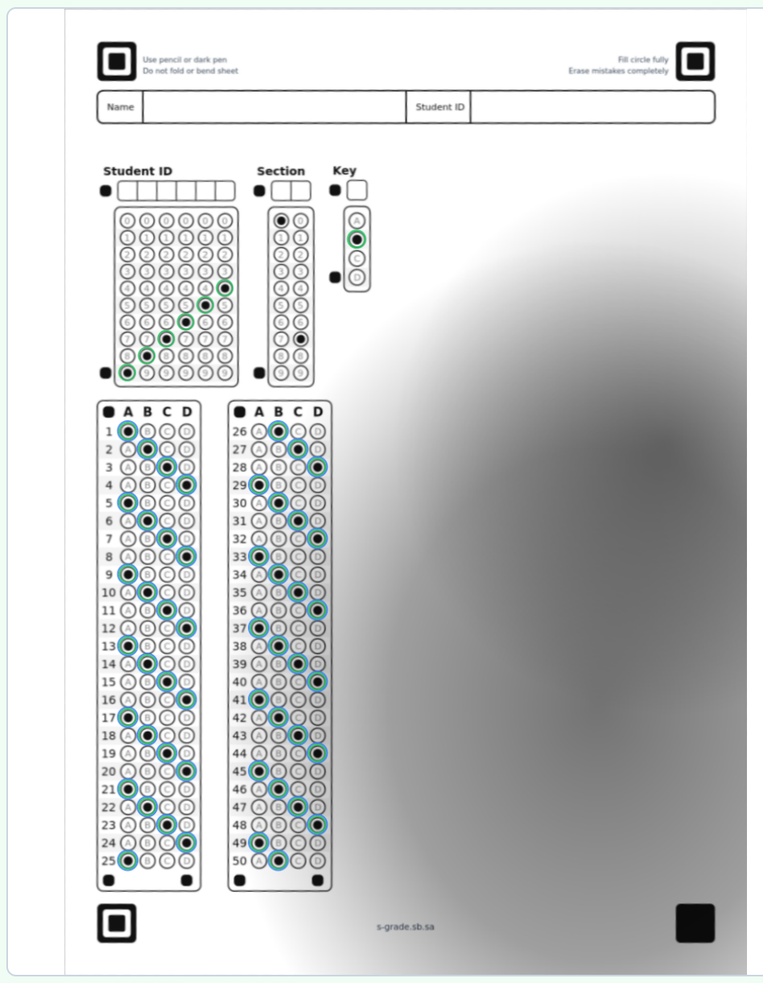
profile: `hand_shadow → rotated_neg3deg → scene_fabric_couch` · 574 passed · 0 failed



INPUT



WARPED



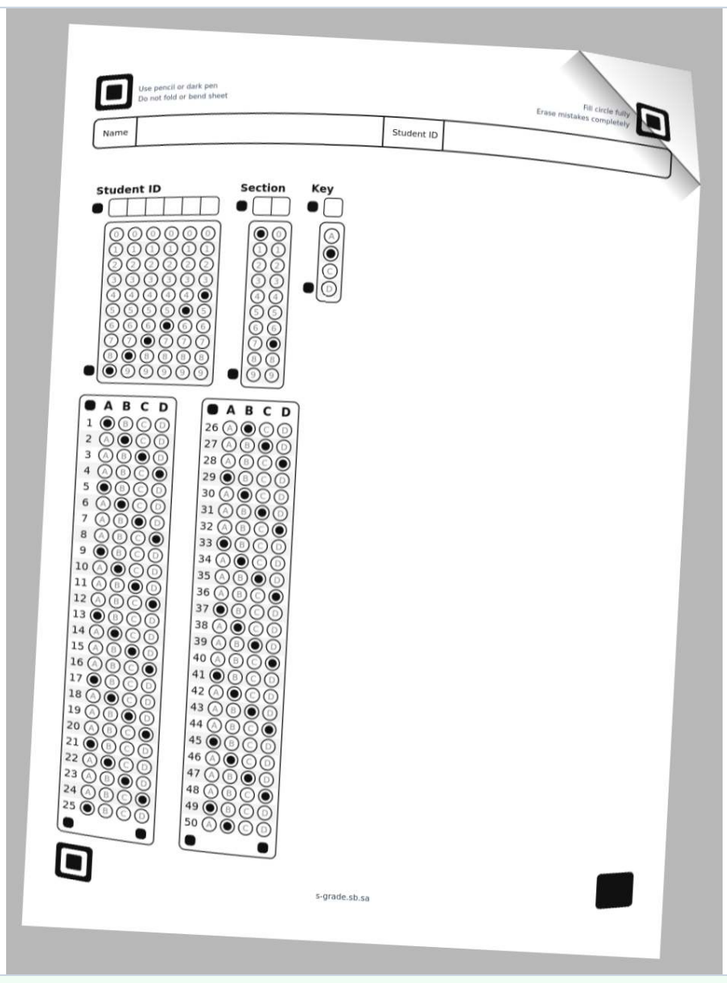
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

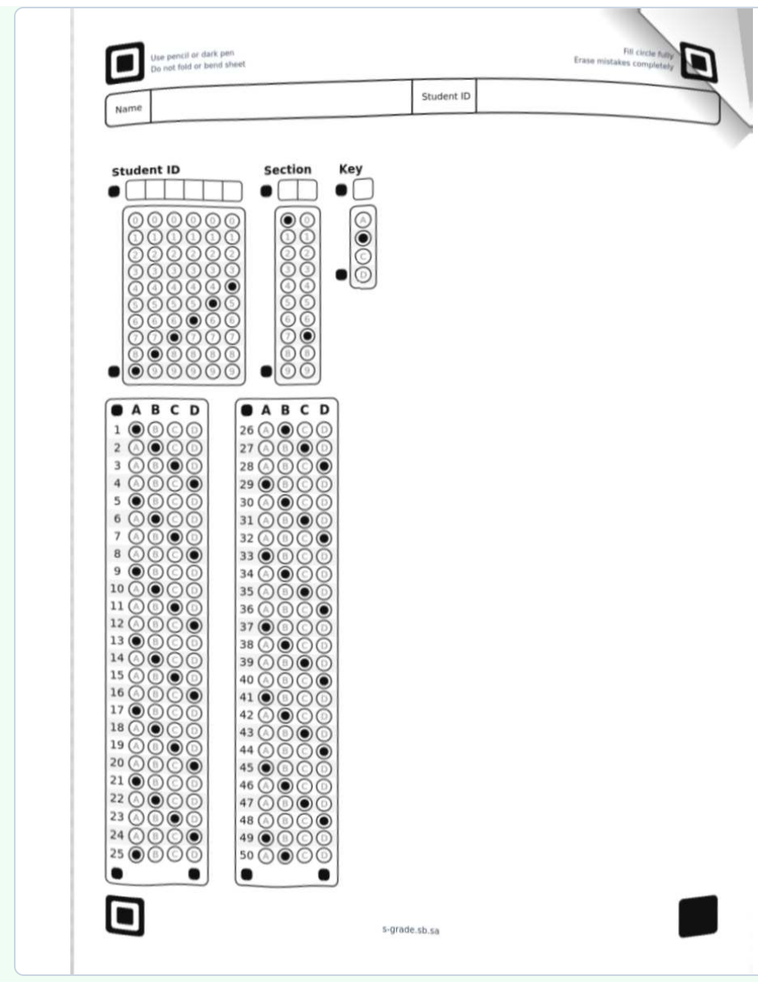
result.json

50q · stacked curl horizontal + bent TR + rotation PASS

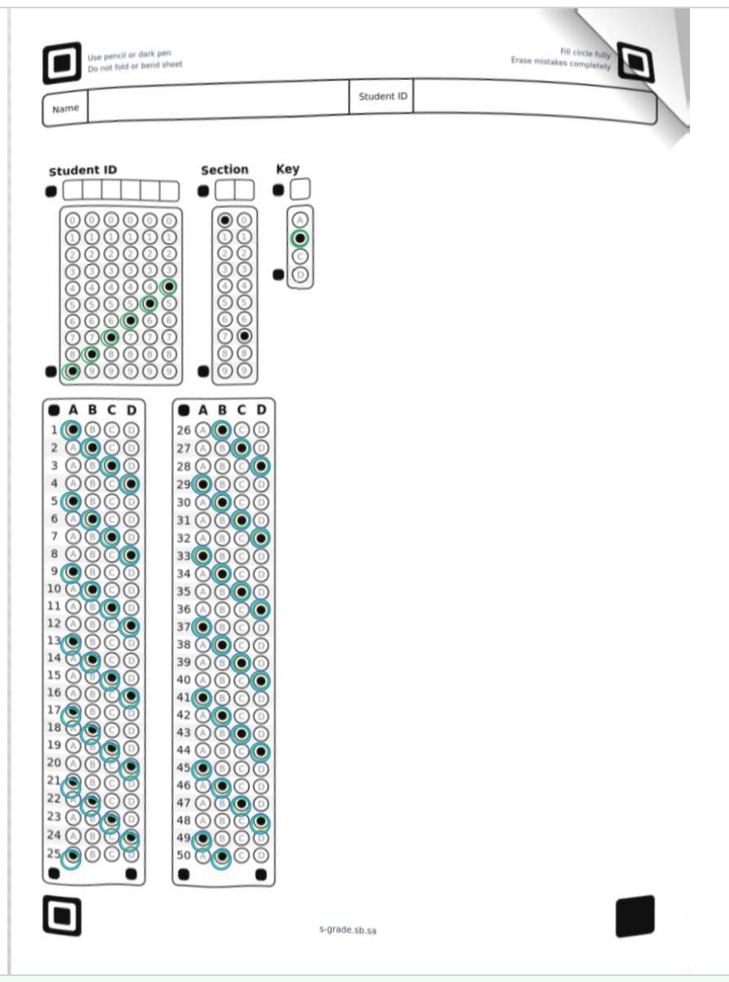
profile: `curled_page_horizontal → bent_corner_tr → rotated_3deg` · 574 passed · 0 failed



INPUT



WARPED



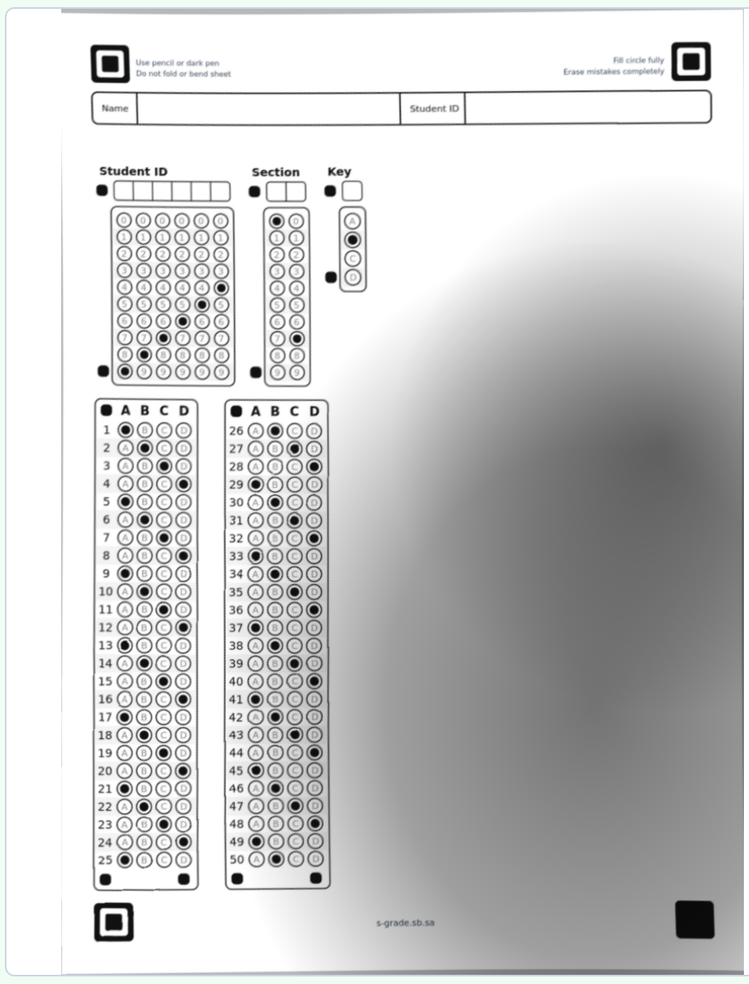
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

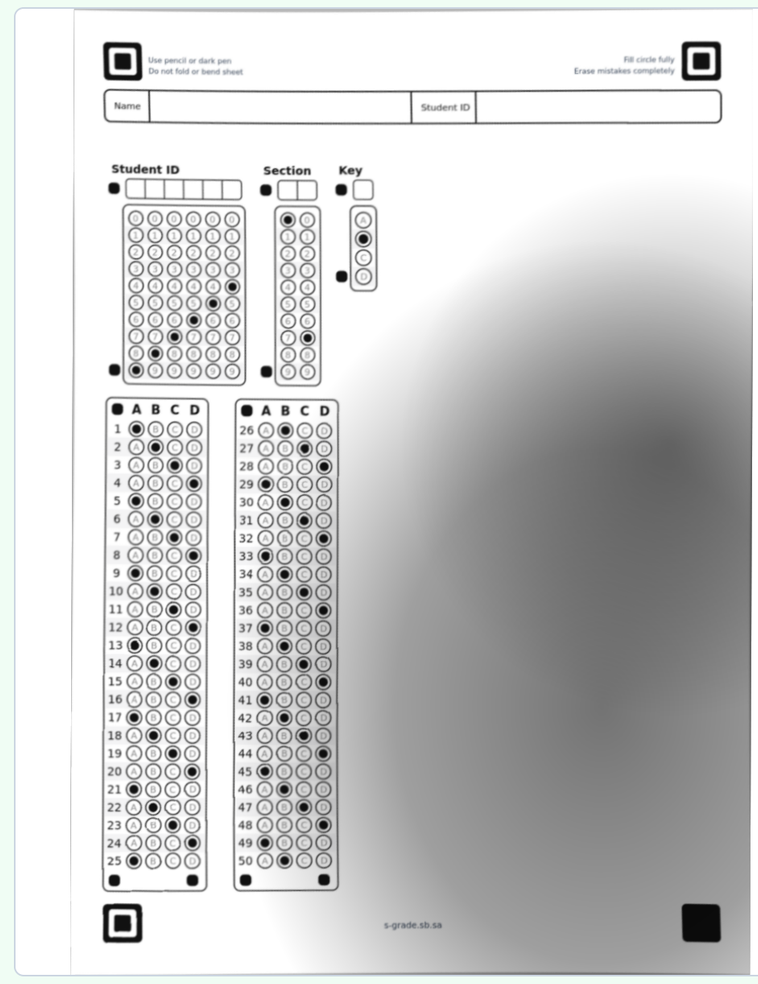
result.json

50q · stacked curl diagonal + hand shadow PASS

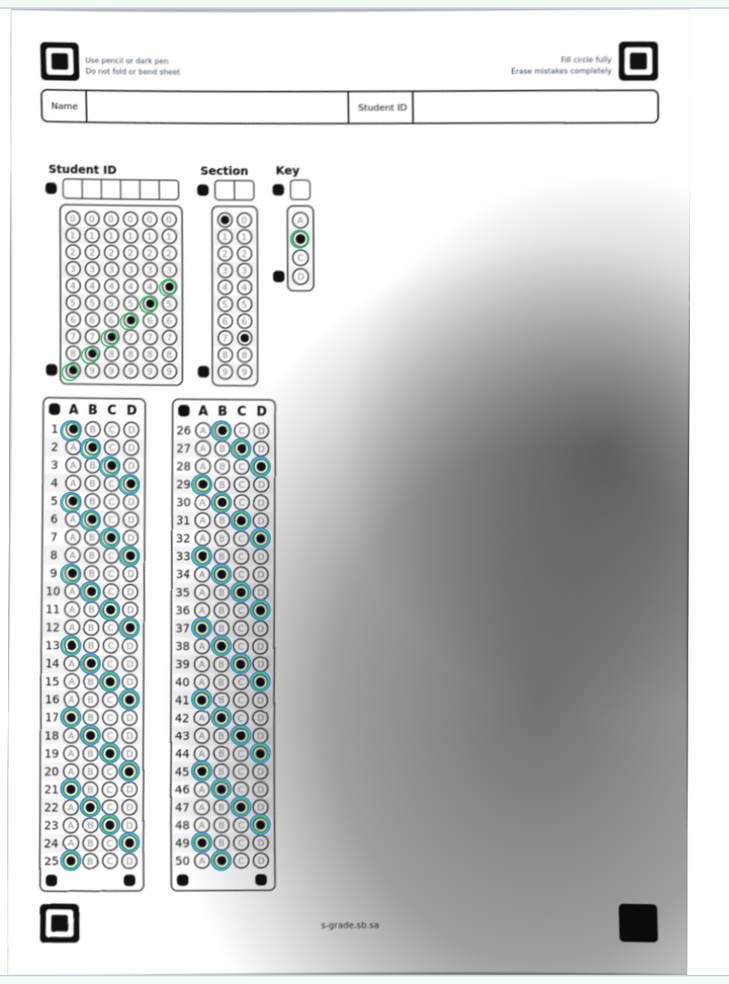
profile: `curled_page_diagonal → hand_shadow` · 574 passed · 0 failed



INPUT



WARPED



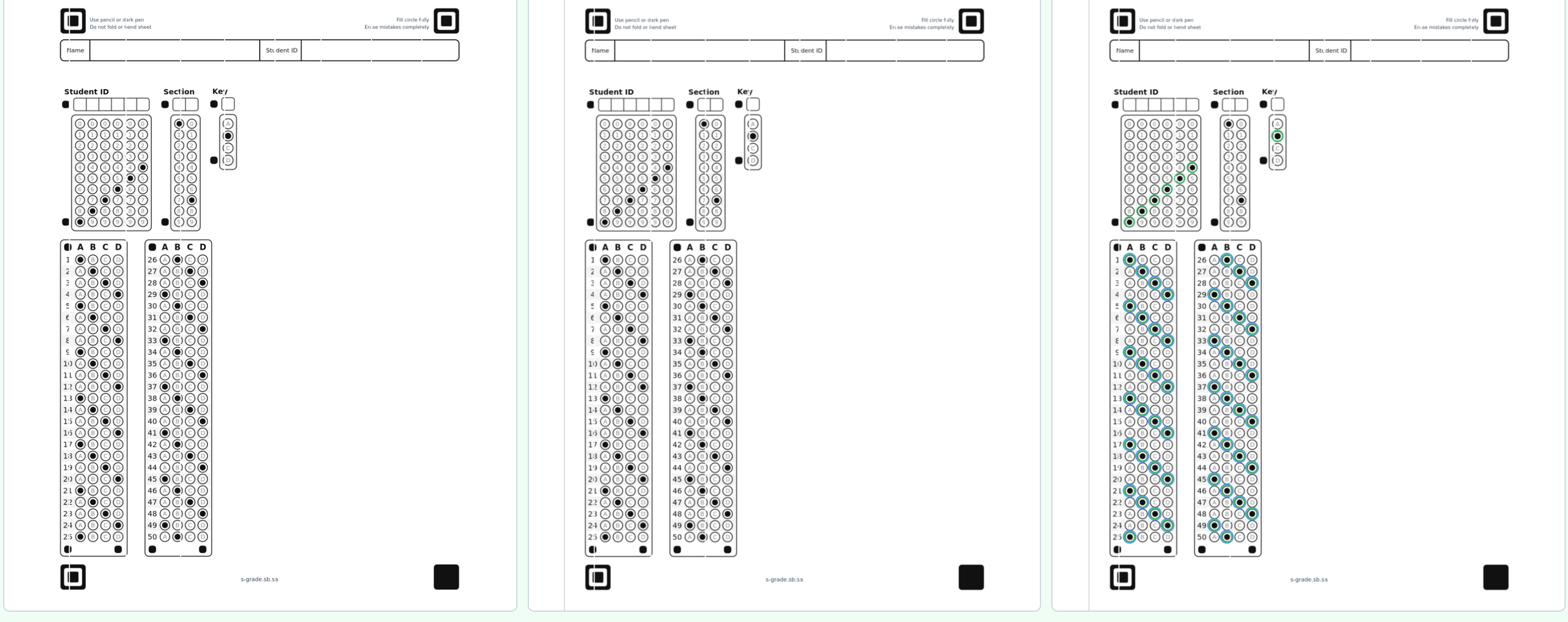
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

50q · drum-stripe ghosting print PASS

profile: `pristine` · 574 passed · 0 failed



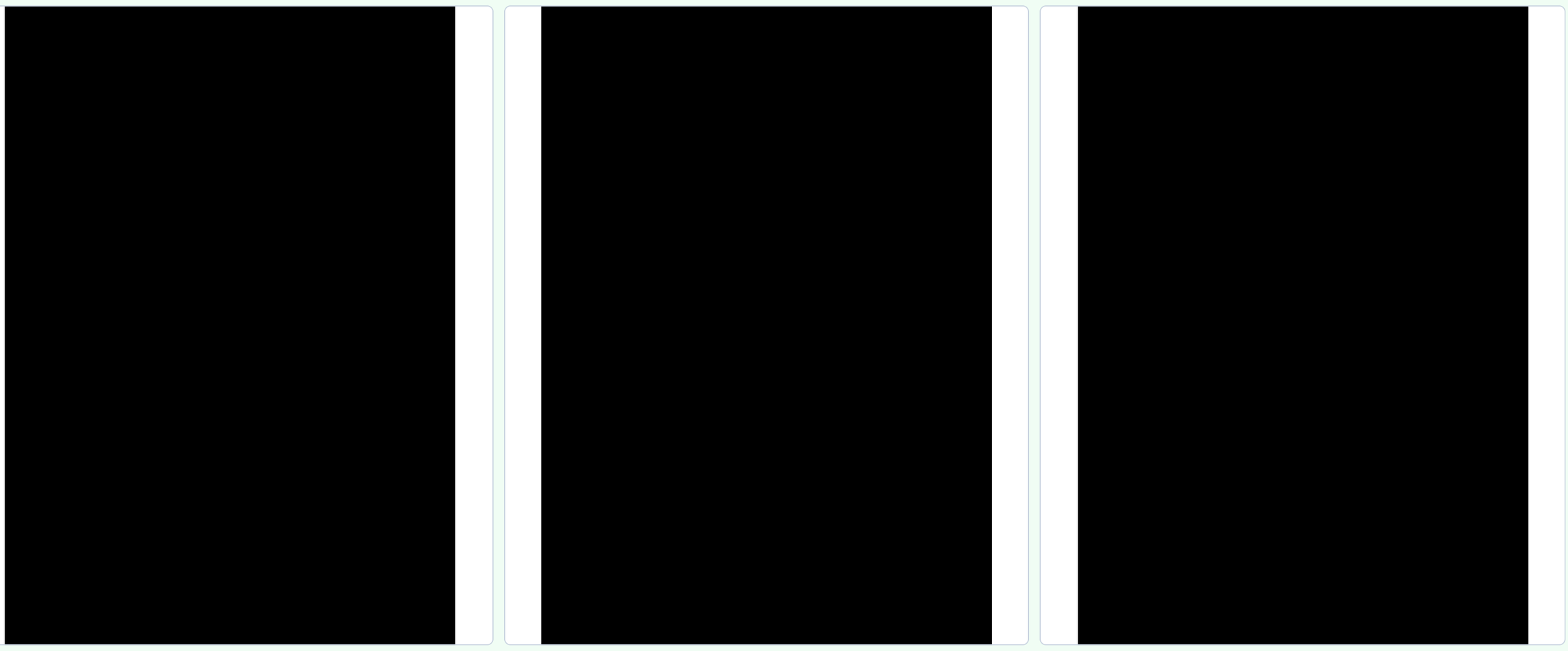
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[NEG] blank black frame PASS NEG

profile: `pristine` · 569 passed · 0 failed



INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] blank white frame PASS NEG

profile: `pristine` · 569 passed · 0 failed

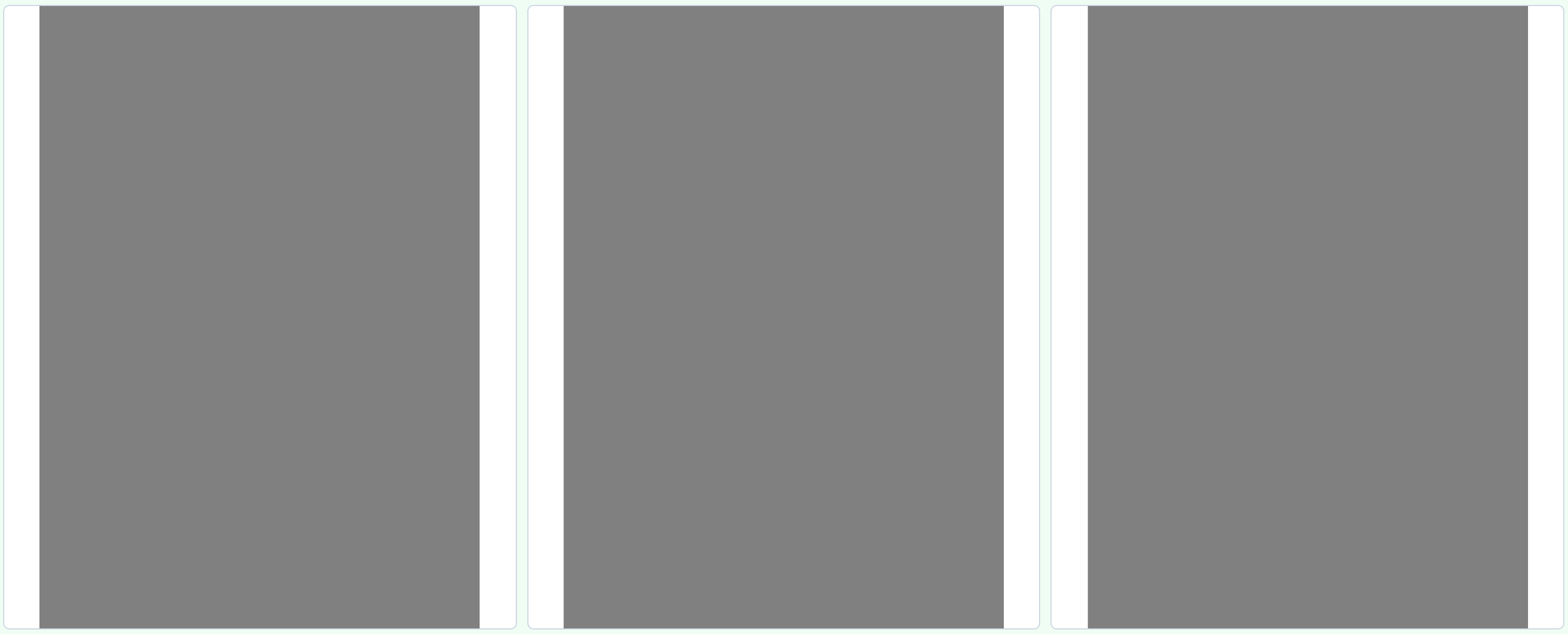
INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] uniform mid-gray frame PASS NEG

profile: `pristine` · 569 passed · 0 failed



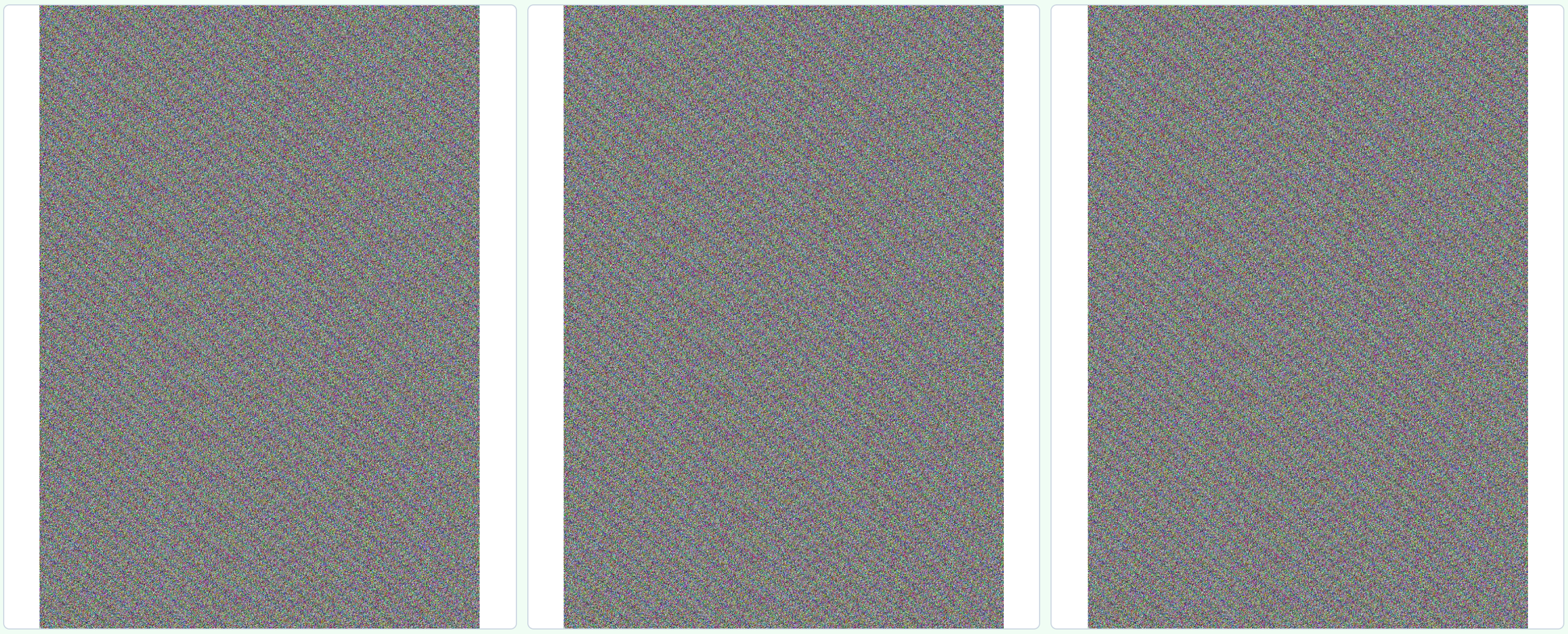
INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] random pixel noise (TV static) PASS NEG

profile: `pristine` · 569 passed · 0 failed



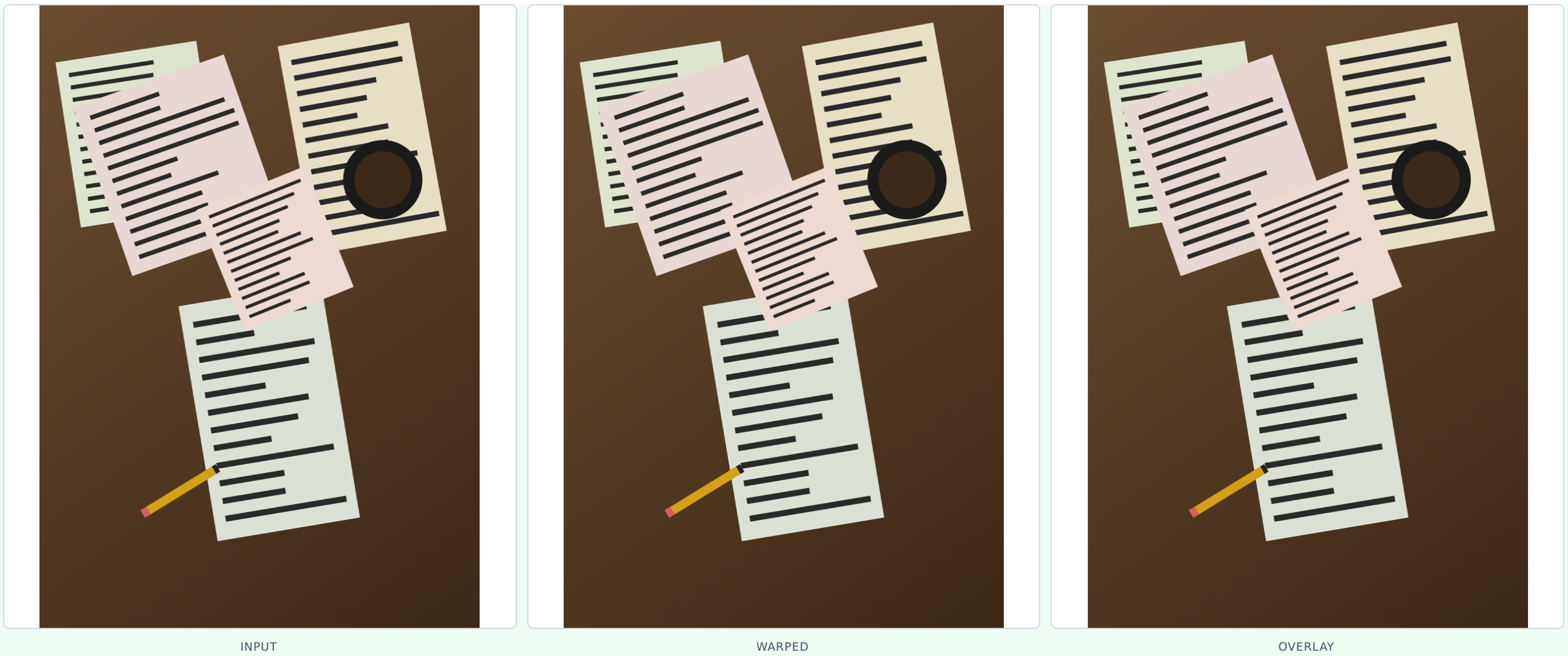
INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] cluttered desk (no sheet in frame) PASS NEG

profile: `pristine` · 569 passed · 0 failed



INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] plain printed text page PASS NEG

profile: `pristine` · 569 passed · 0 failed



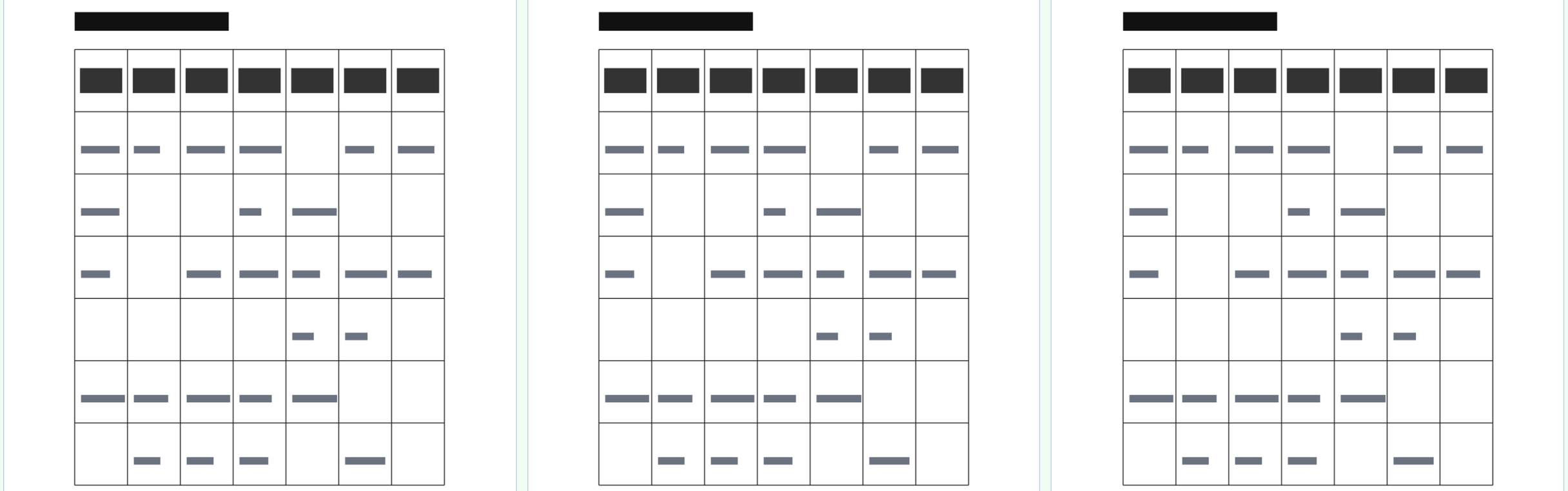
INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] calendar / spreadsheet grid PASS NEG

profile: `pristine` · 569 passed · 0 failed



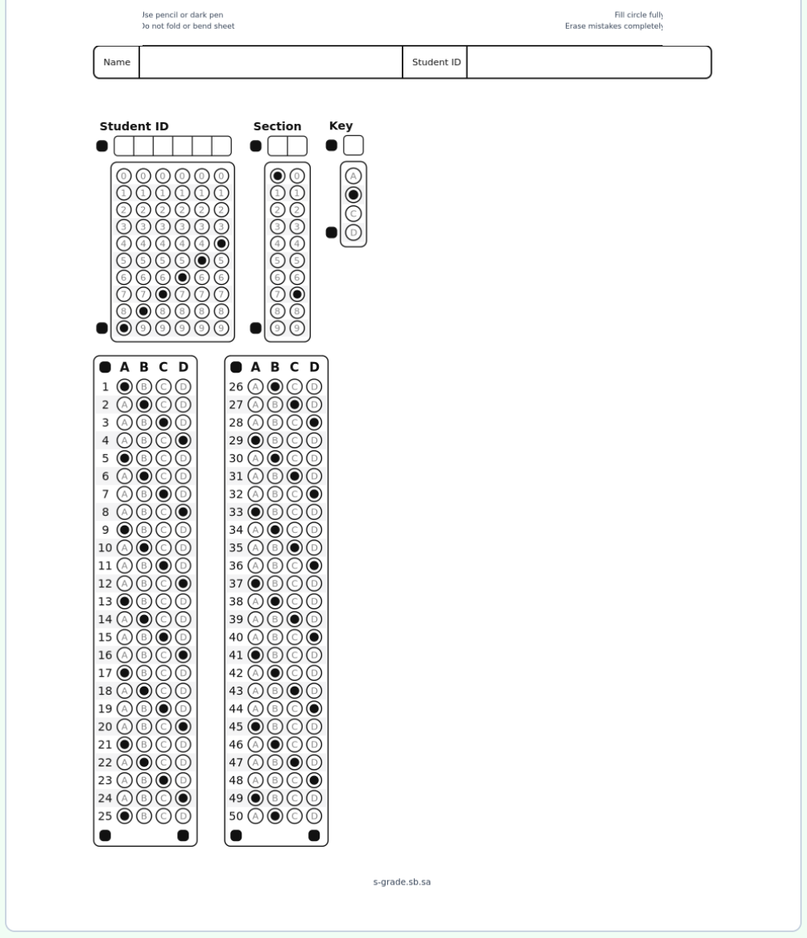
INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

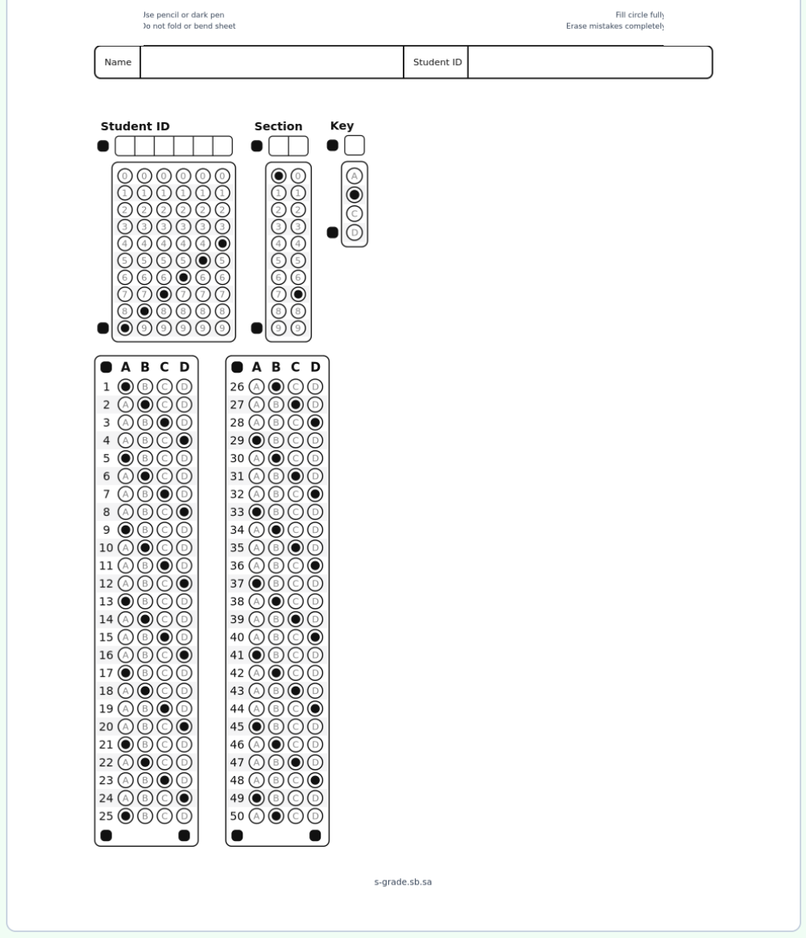
result.json

[NEG] sheet with all 4 fiducials masked PASS NEG

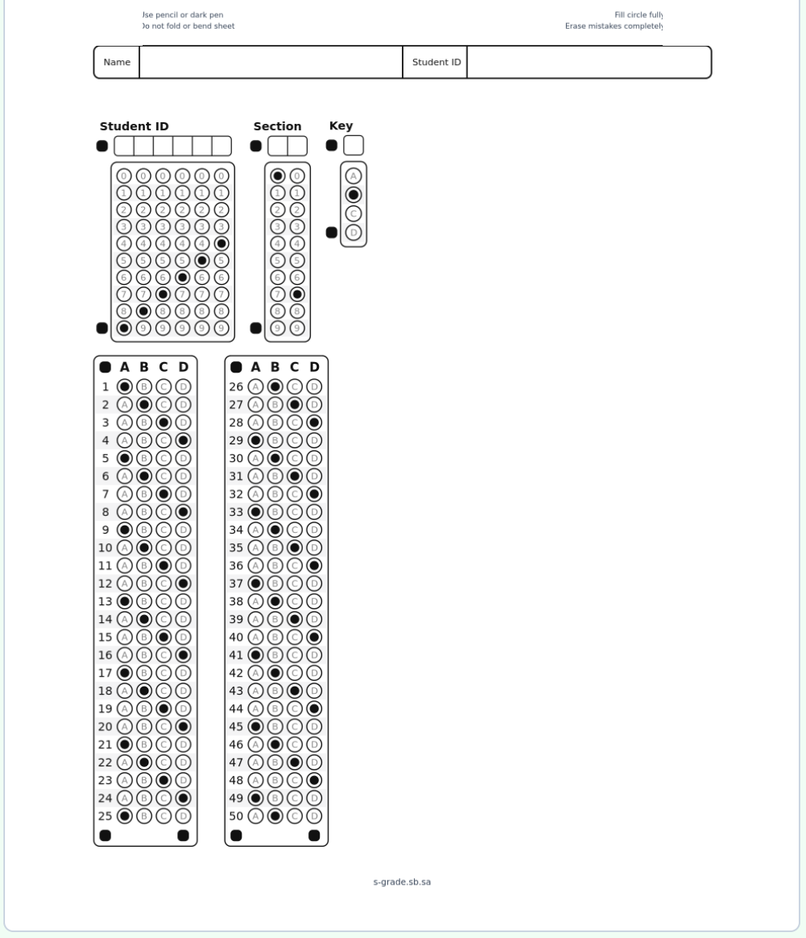
profile: `pristine` · 569 passed · 0 failed



INPUT



WARPED



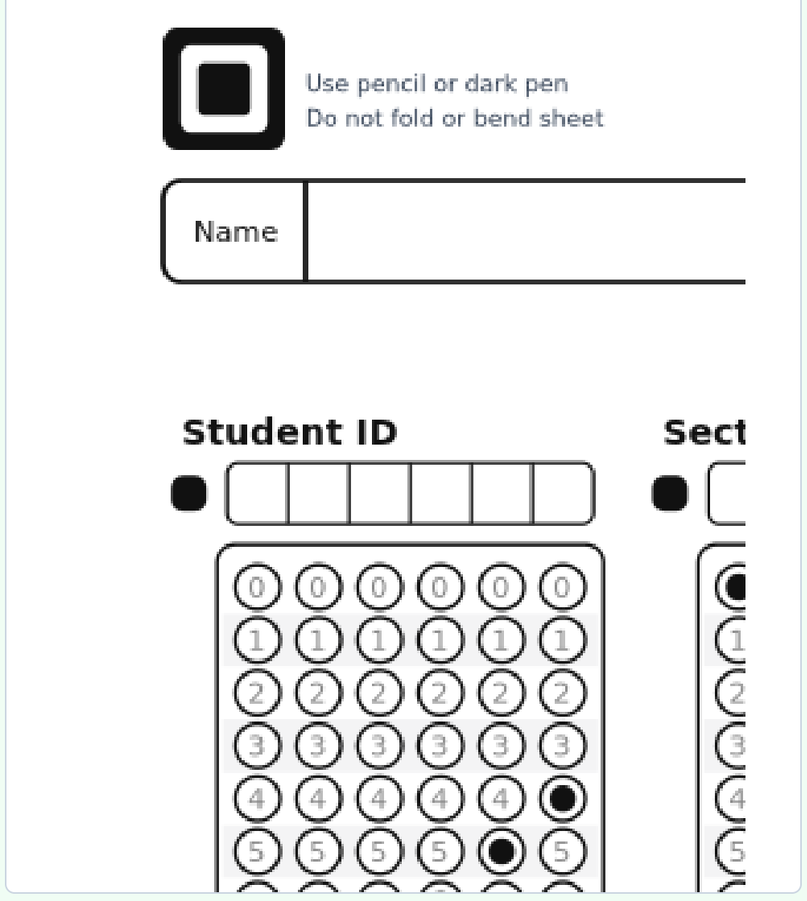
OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

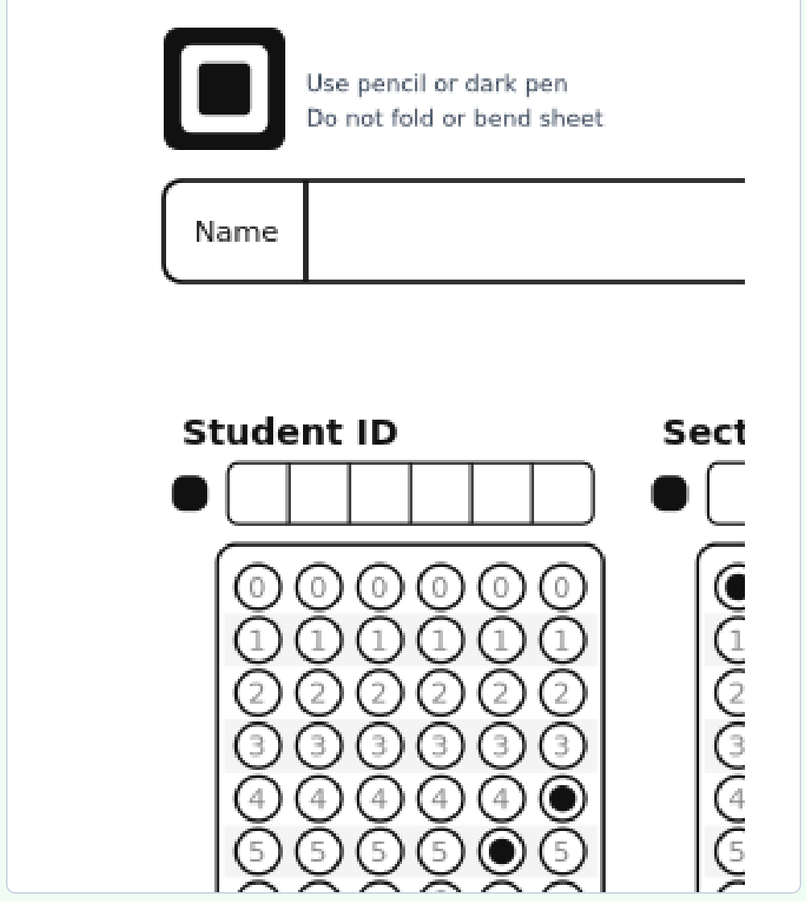
result.json

[NEG] only TL corner of sheet in frame PASS NEG

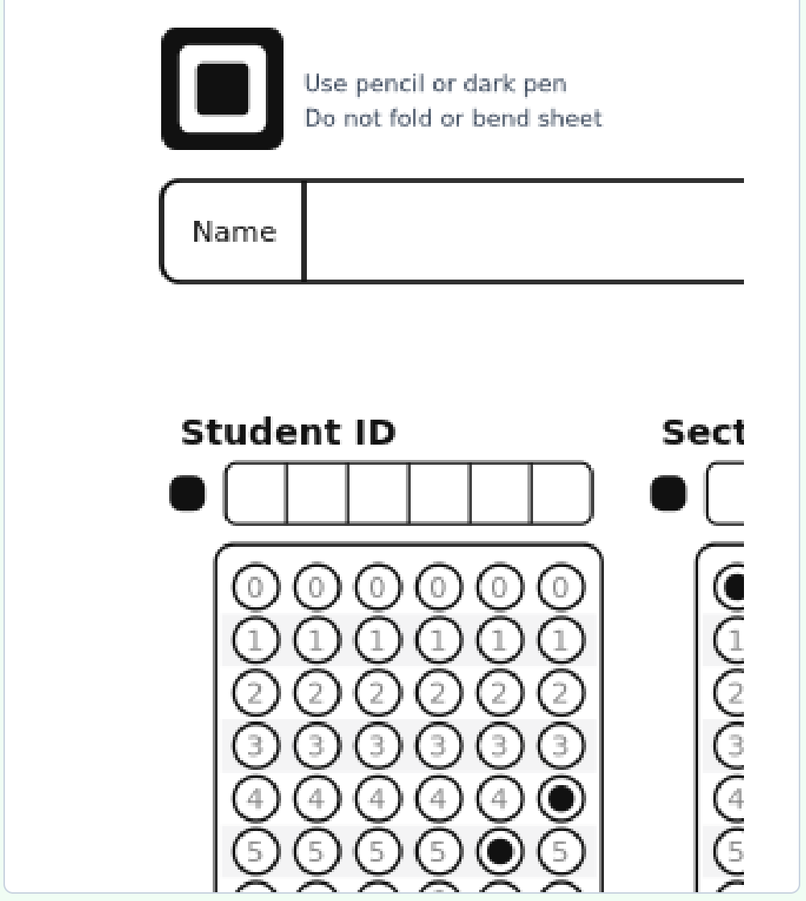
profile: `pristine` · 569 passed · 0 failed



INPUT



WARPED



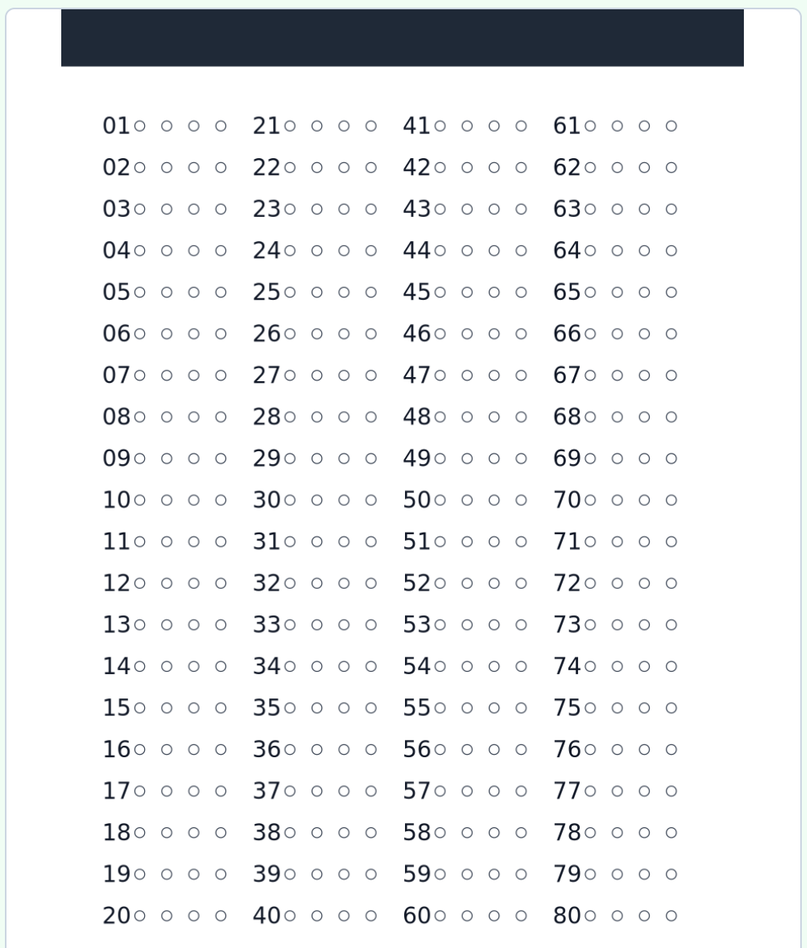
OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

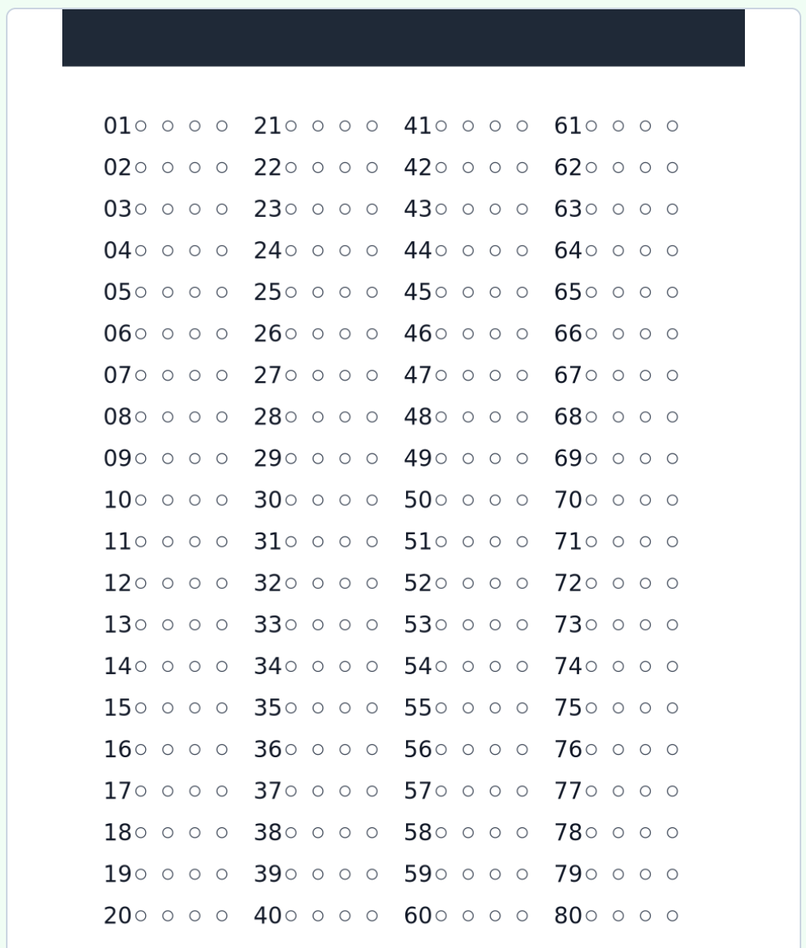
result.json

[NEG] different-vendor bubble sheet (no fiducials) PASS NEG

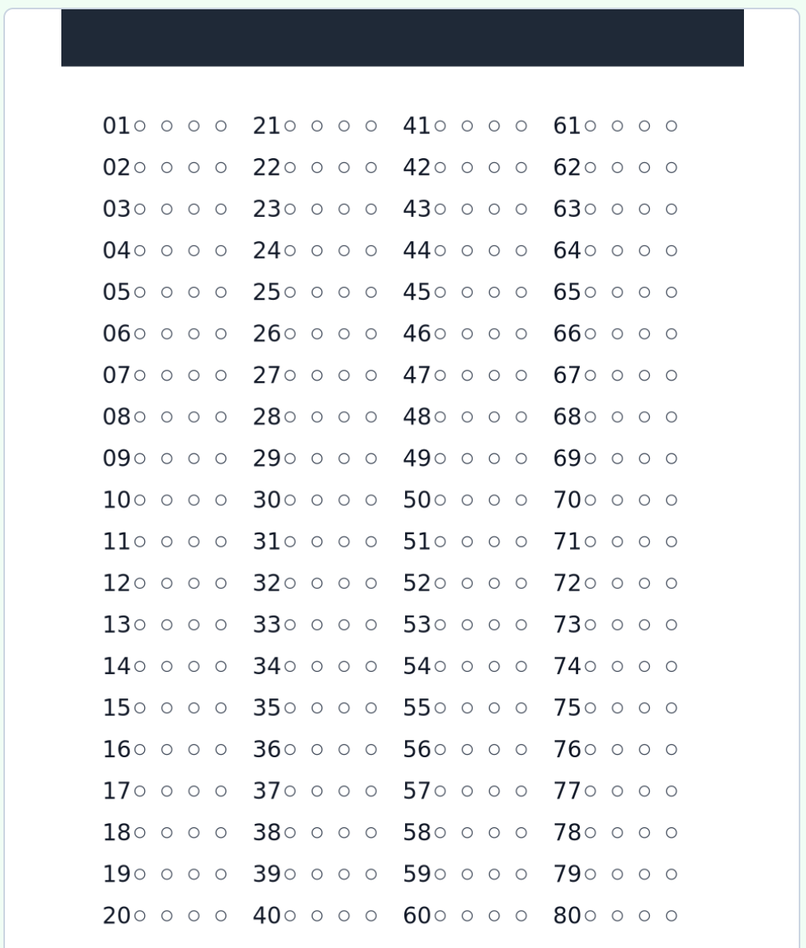
profile: `pristine` · 569 passed · 0 failed



INPUT



WARPED



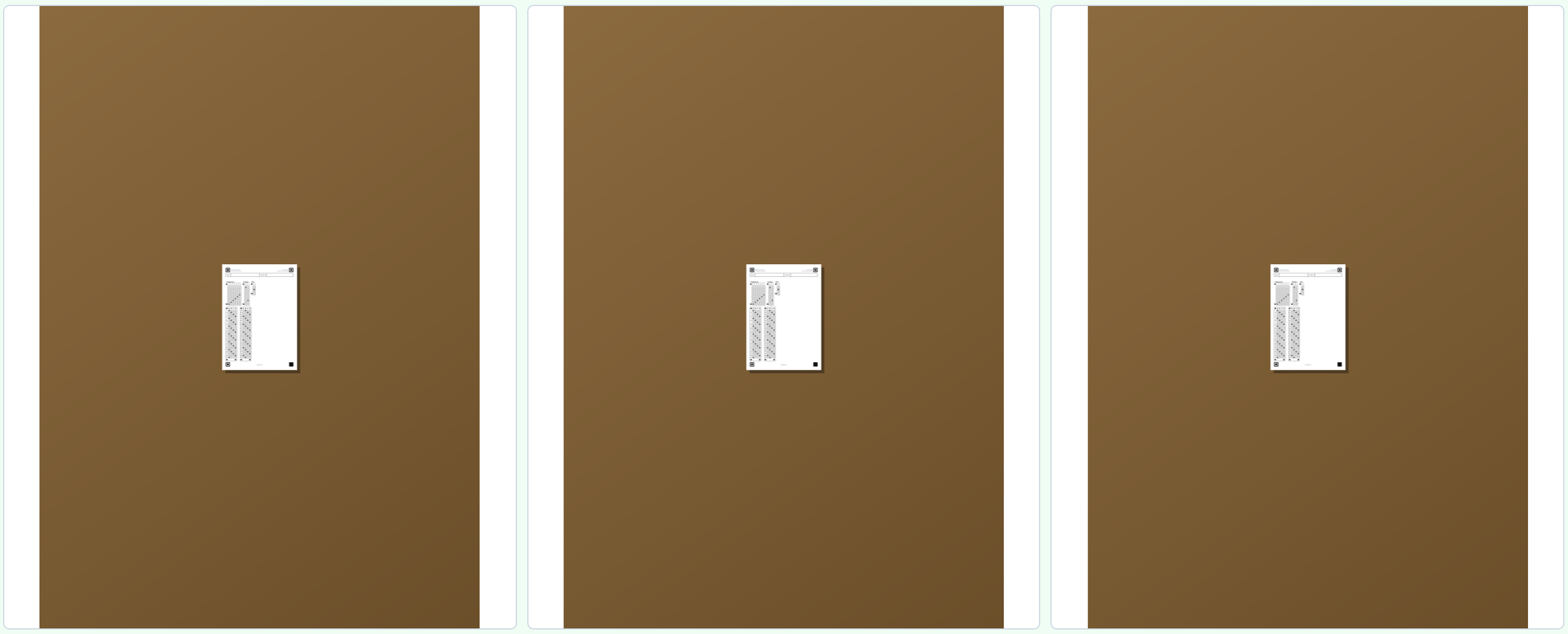
OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] sheet too far (~3% of frame) PASS NEG

profile: `pristine` · 569 passed · 0 failed



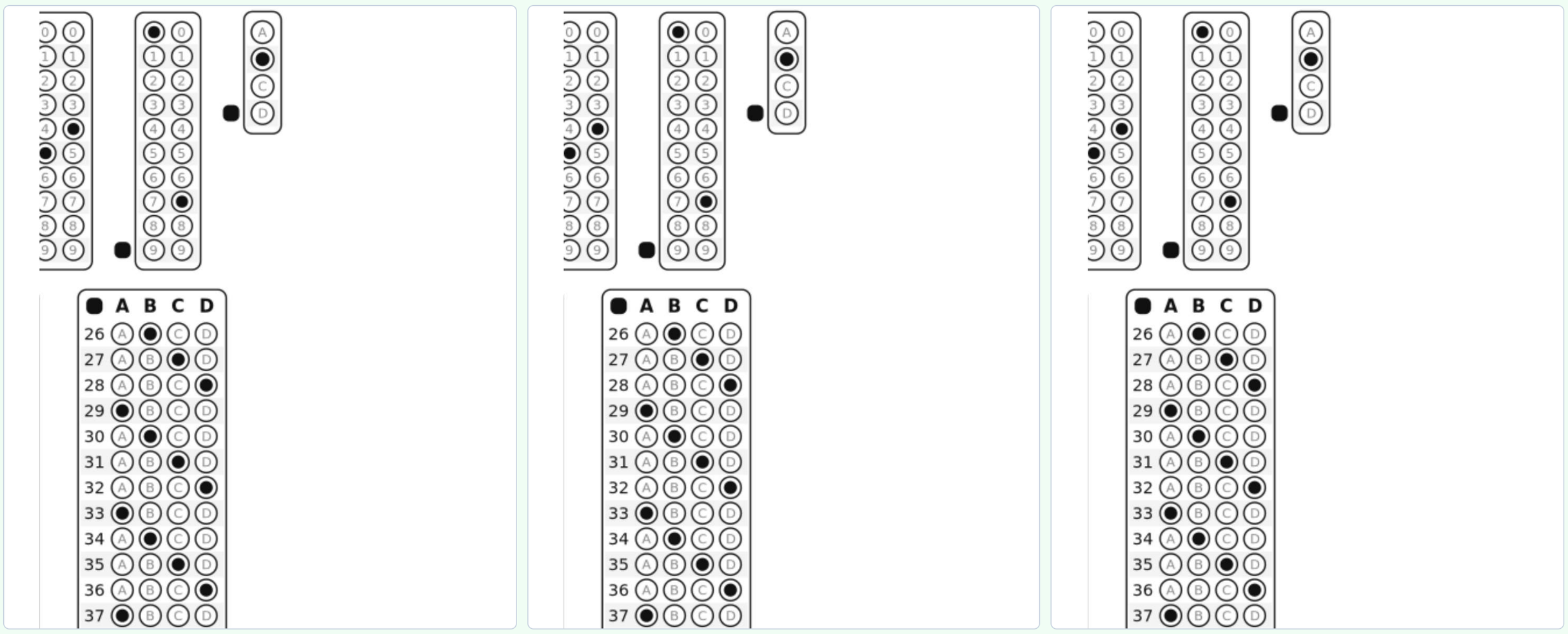
INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

result.json

[NEG] sheet too close (fiducials cropped) PASS NEG

profile: `pristine` · 569 passed · 0 failed



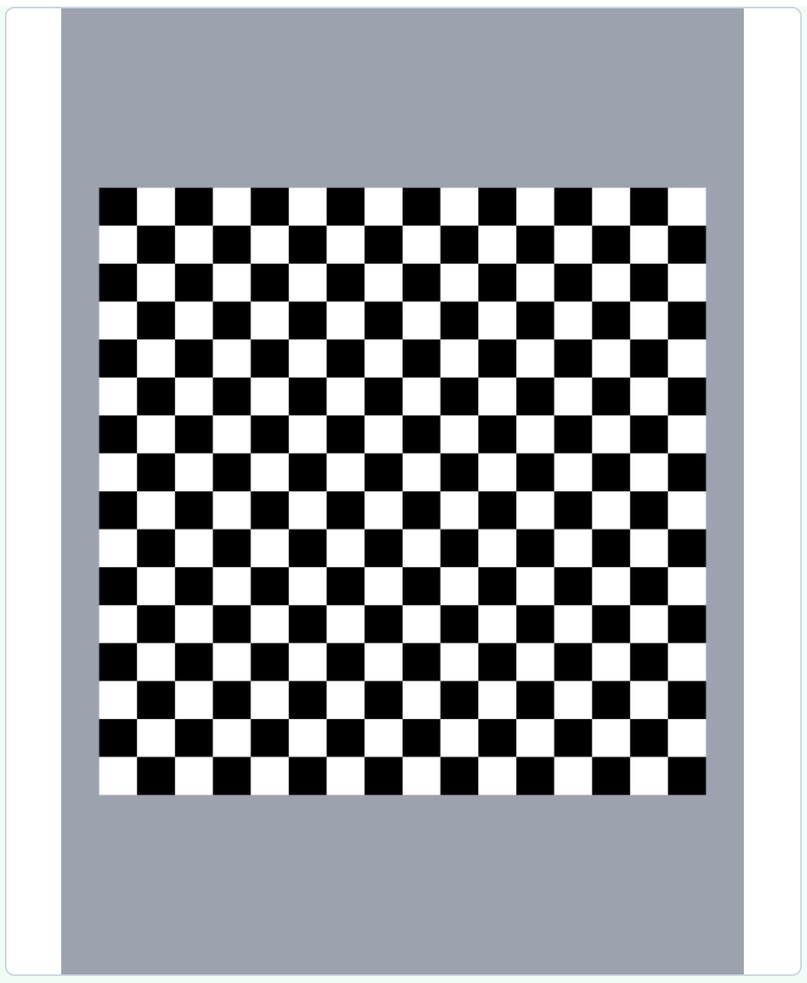
INPUT WARPED OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

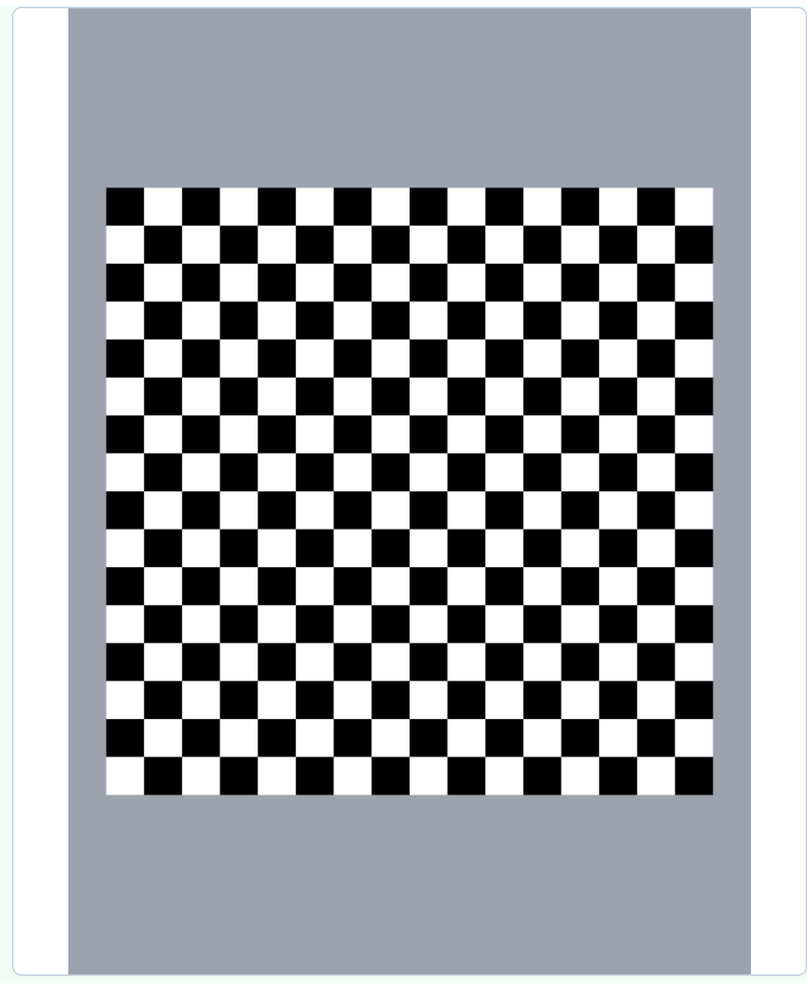
result.json

[NEG] checkerboard calibration pattern PASS NEG

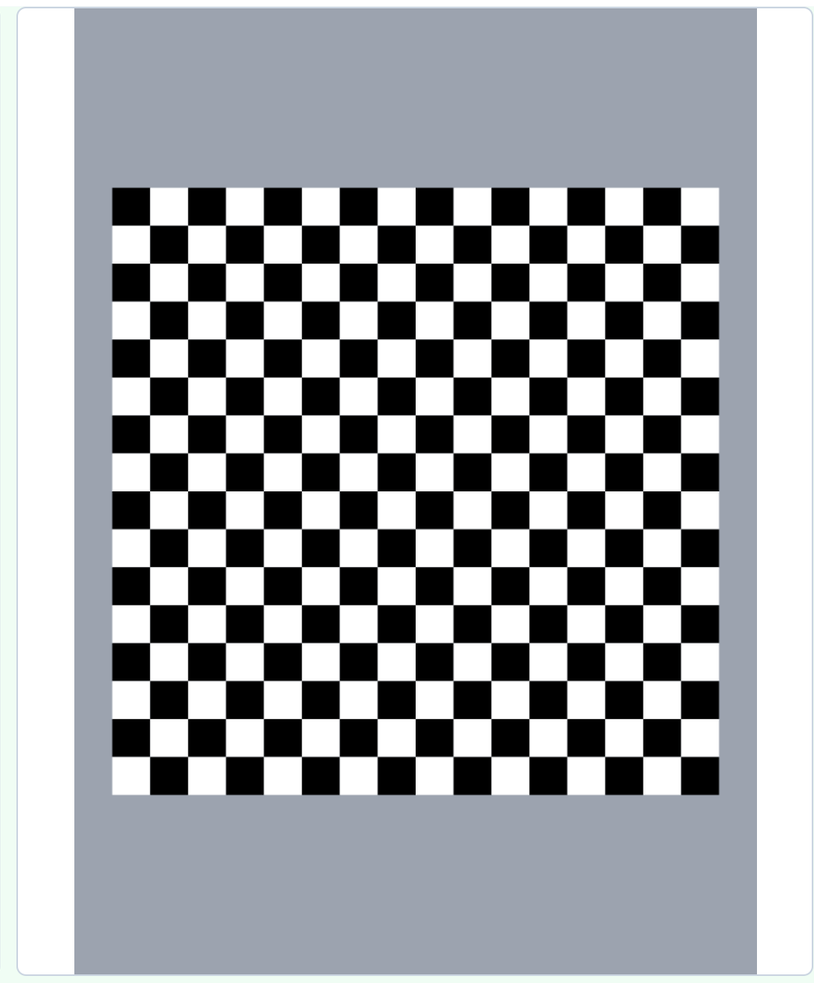
profile: `pristine` · 569 passed · 0 failed



INPUT



WARPED



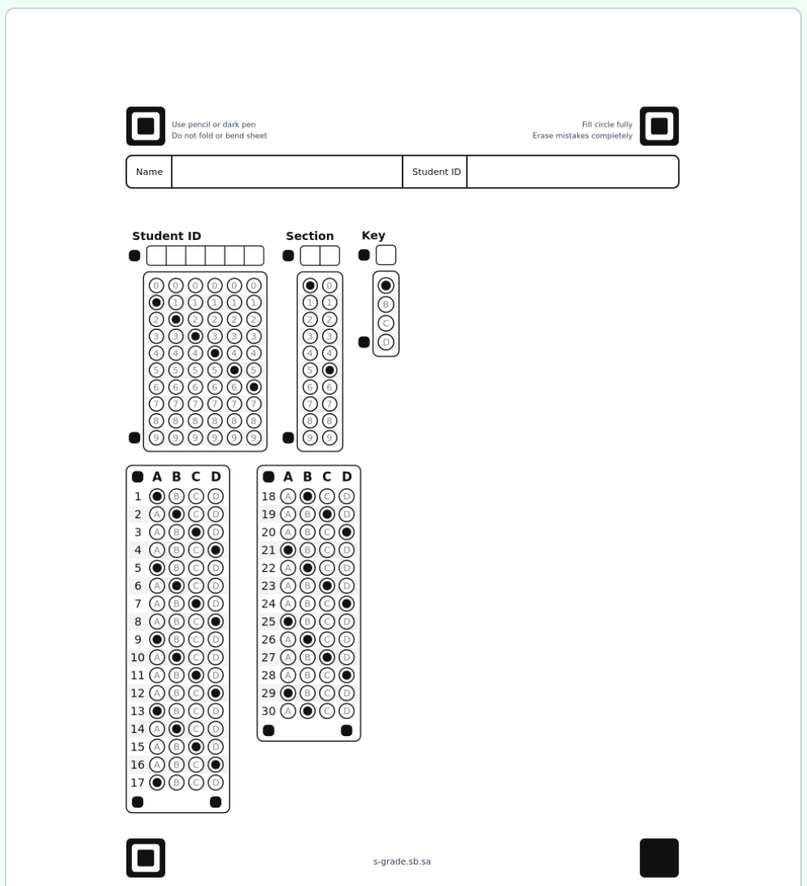
OVERLAY

field	expected	actual	
outcome	`rejected`	`rejected`	✓

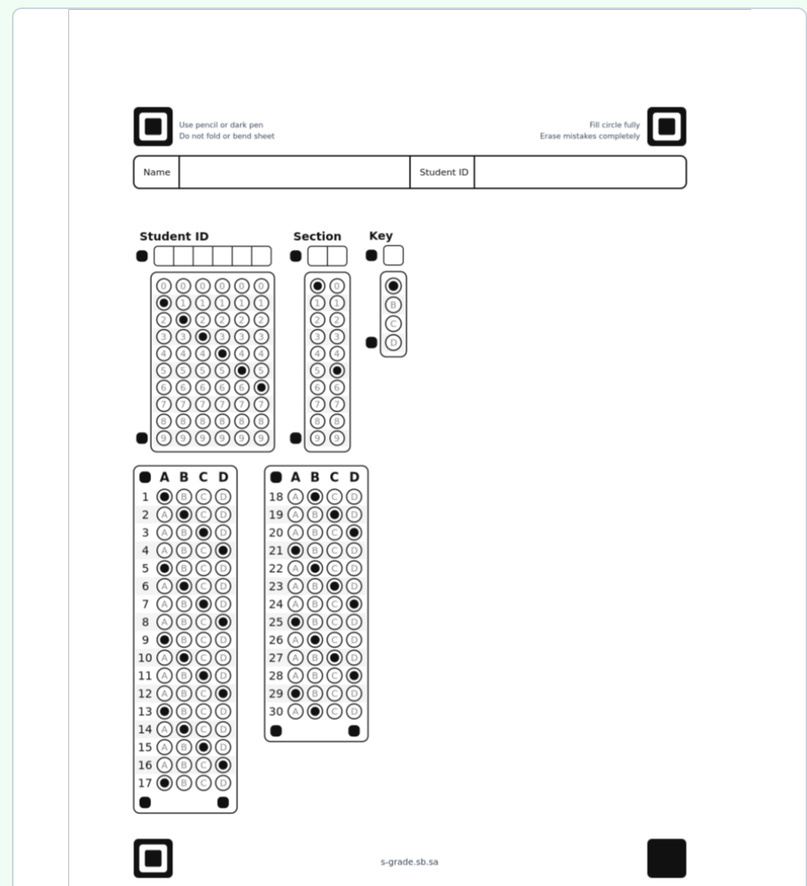
result.json

30q · wide margins (H=20,V=30) · pristine PASS

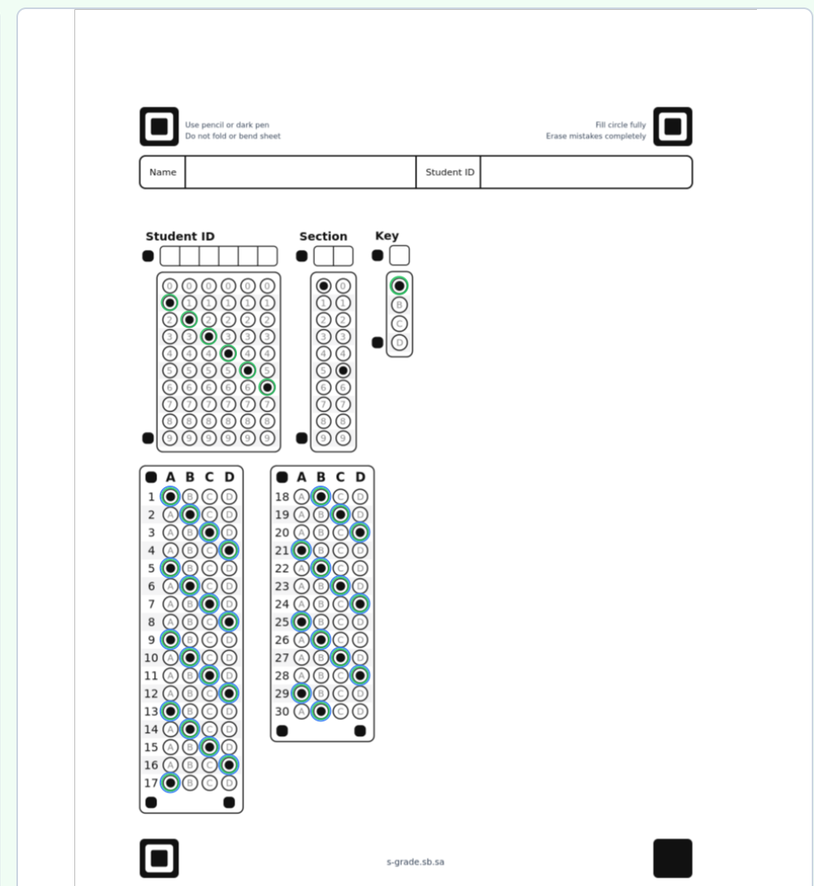
profile: `pristine` · 414 passed · 0 failed



INPUT



WARPED



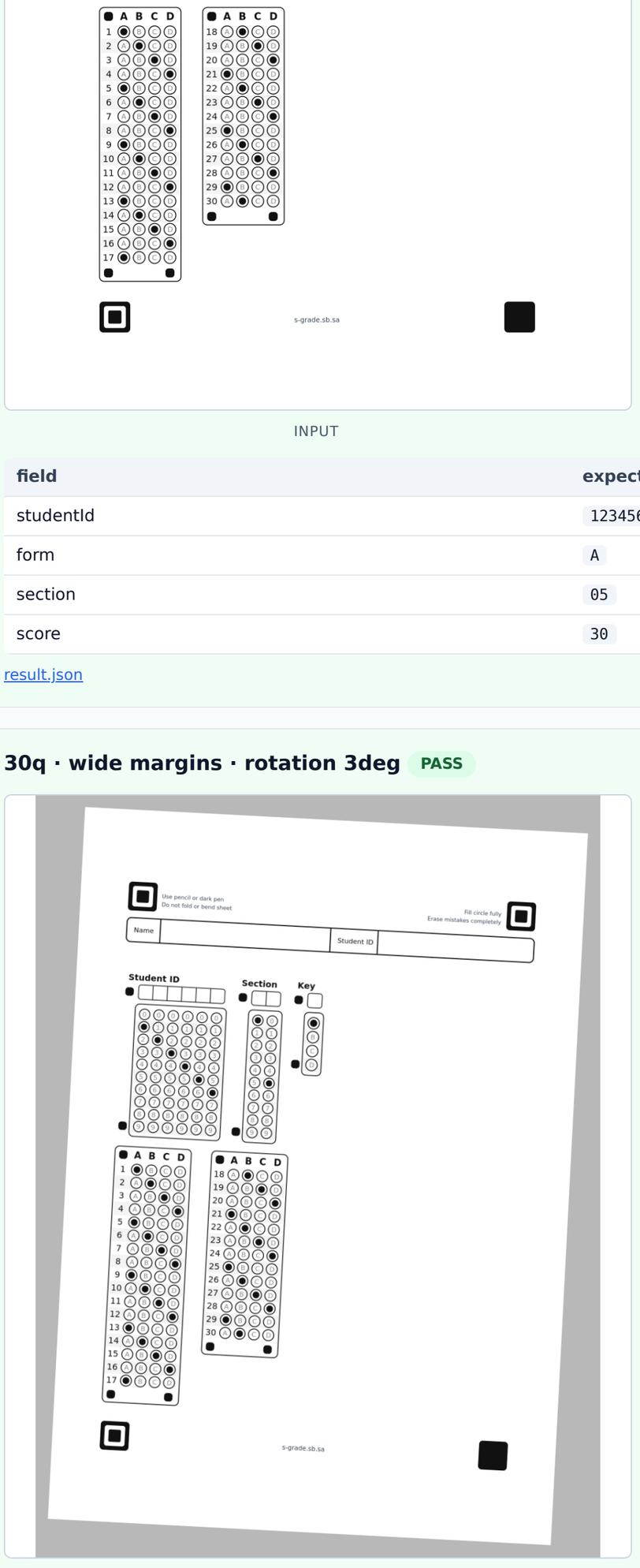
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

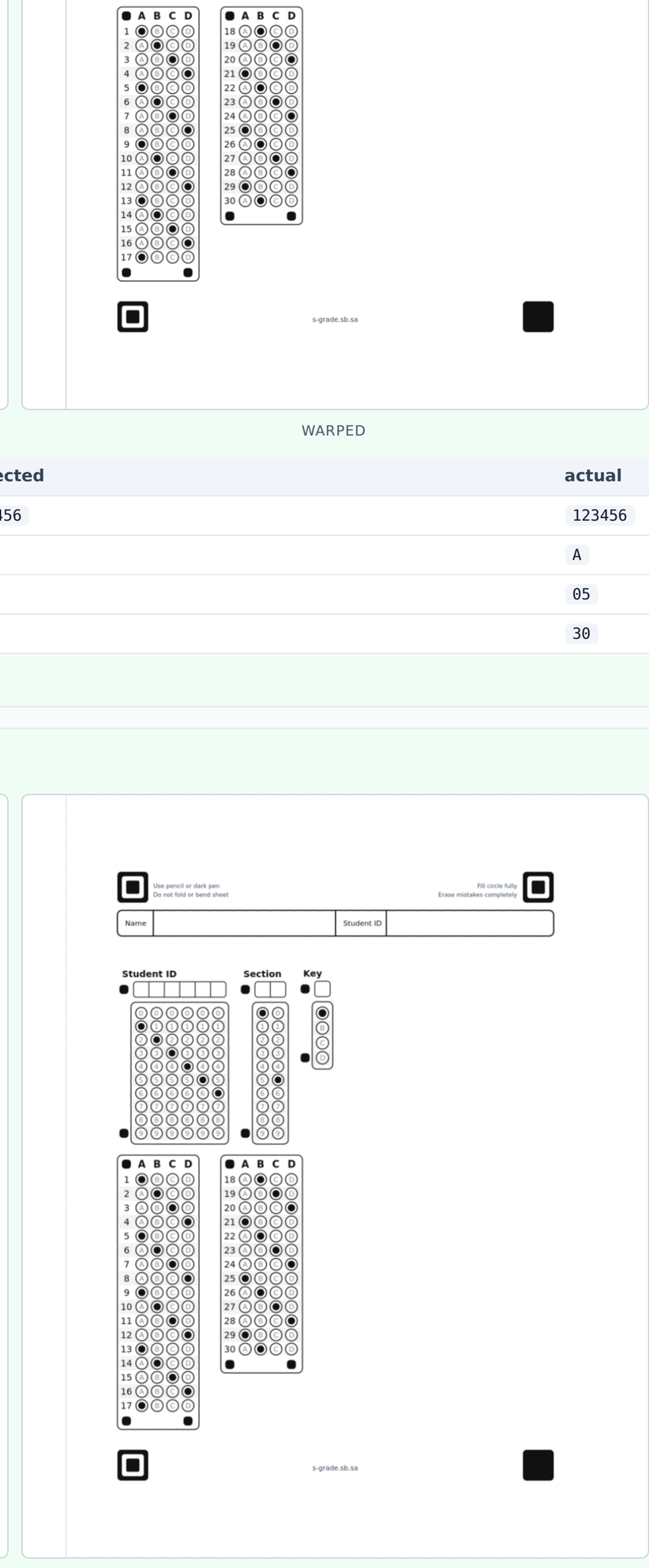
result.json

30q · wide margins · rotation 3deg PASS

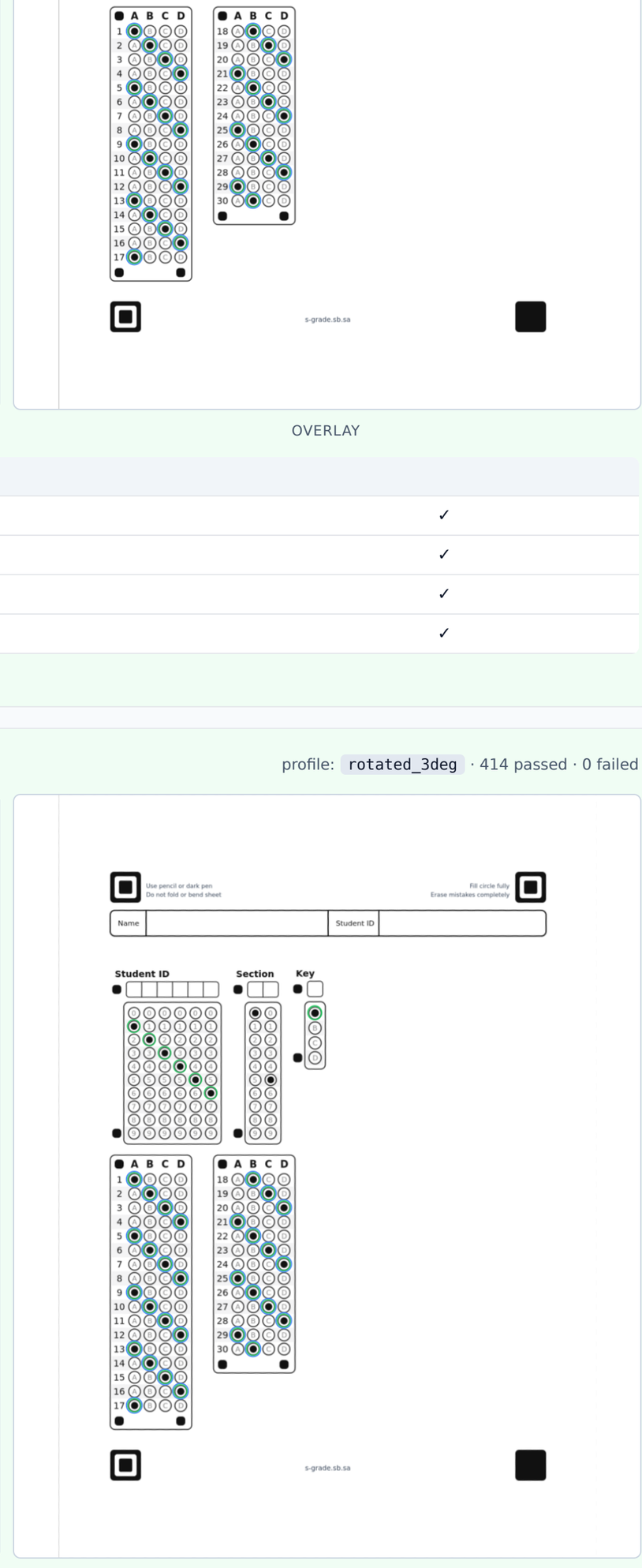
profile: `rotated_3deg` · 414 passed · 0 failed



INPUT



WARPED



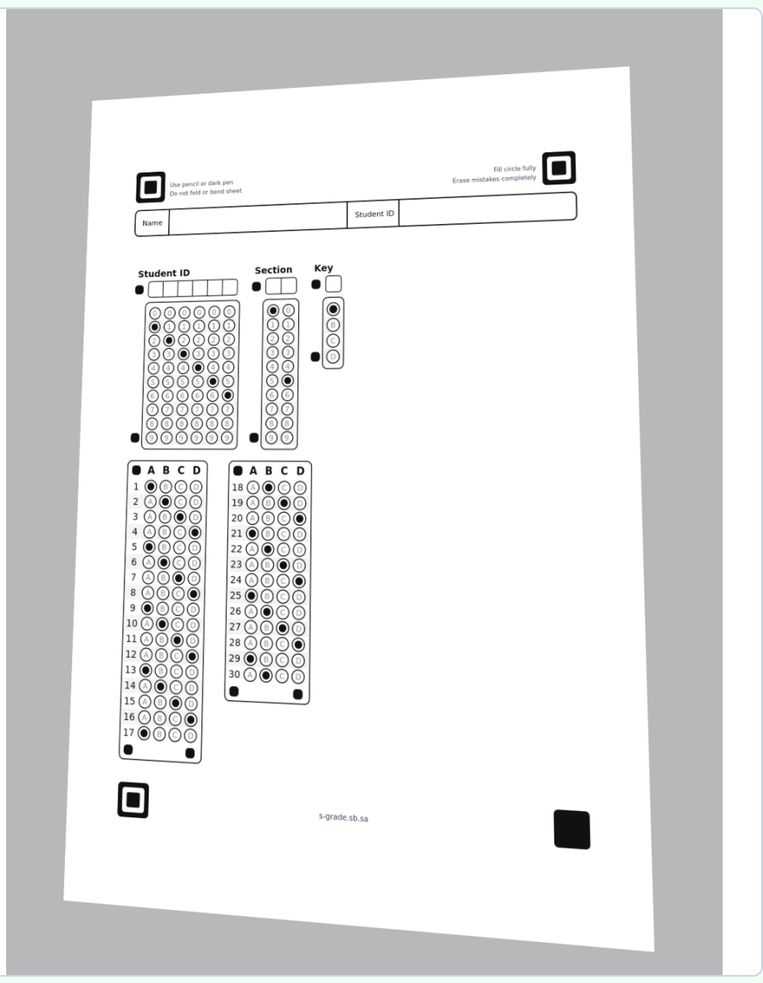
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

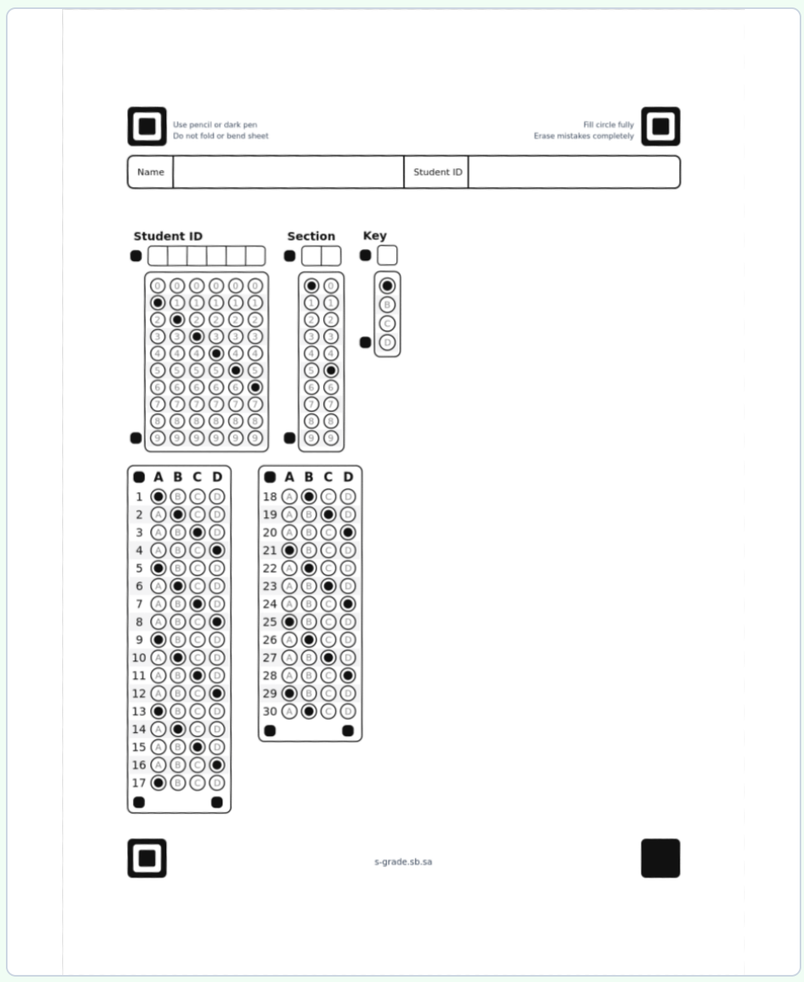
result.json

30q · wide margins · perspective mild PASS

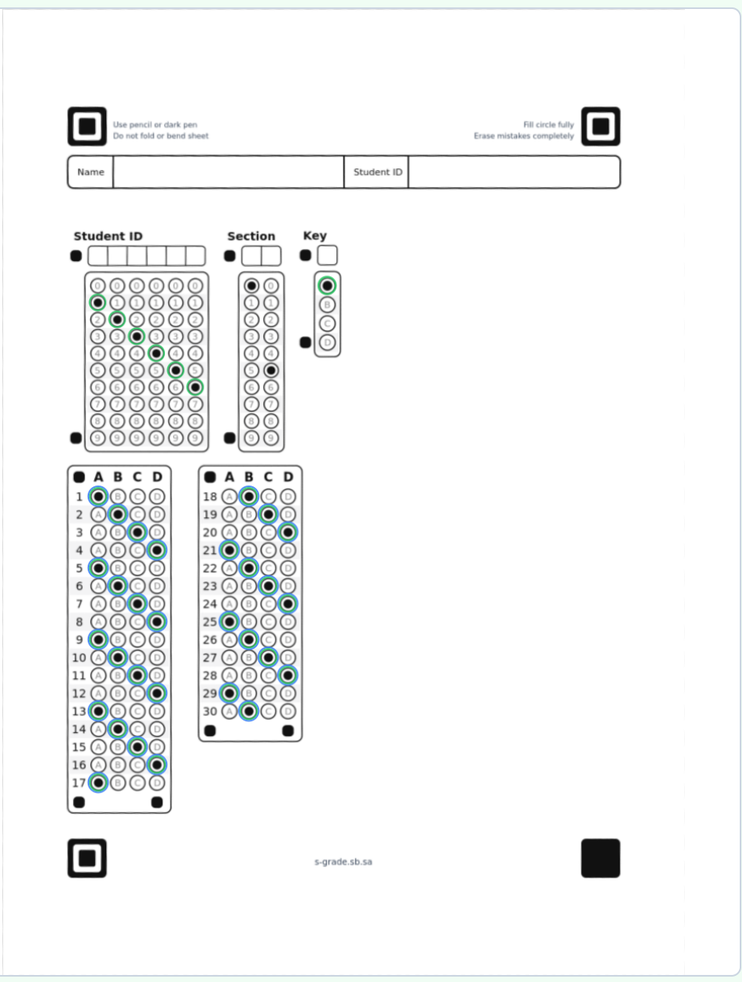
profile: `perspective_mild` · 414 passed · 0 failed



INPUT



WARPED



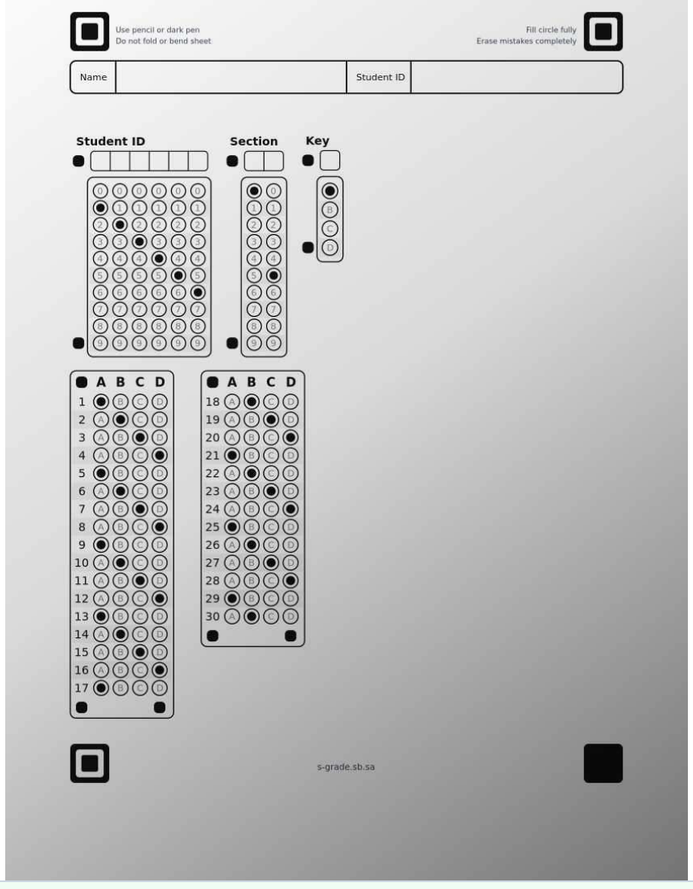
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

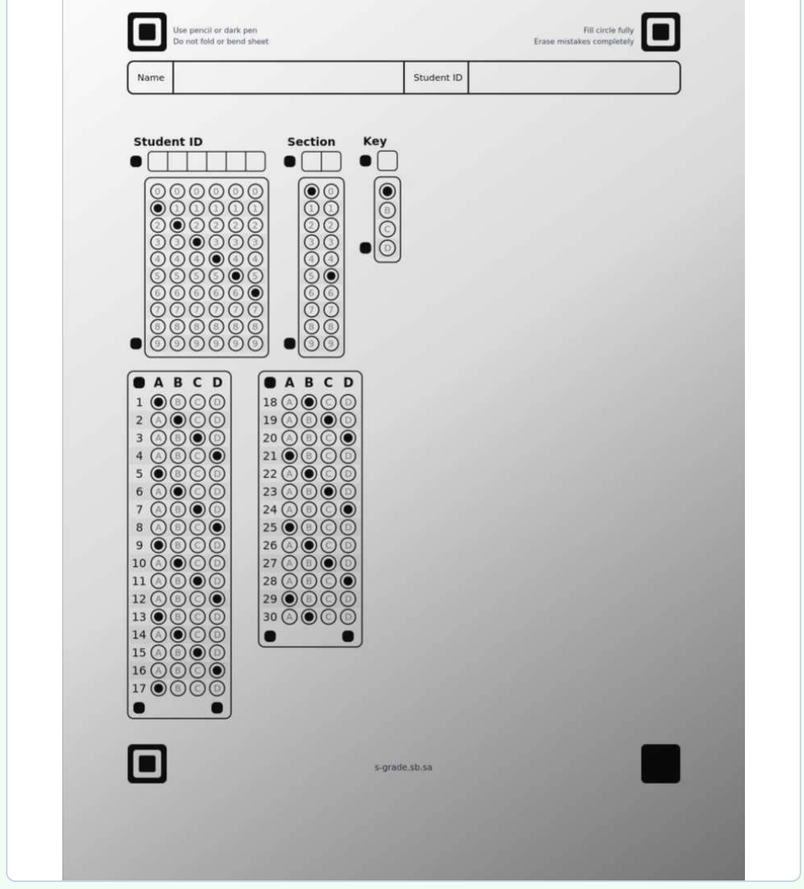
result.json

30q · wide margins · lighting gradient + jpeg q50 PASS

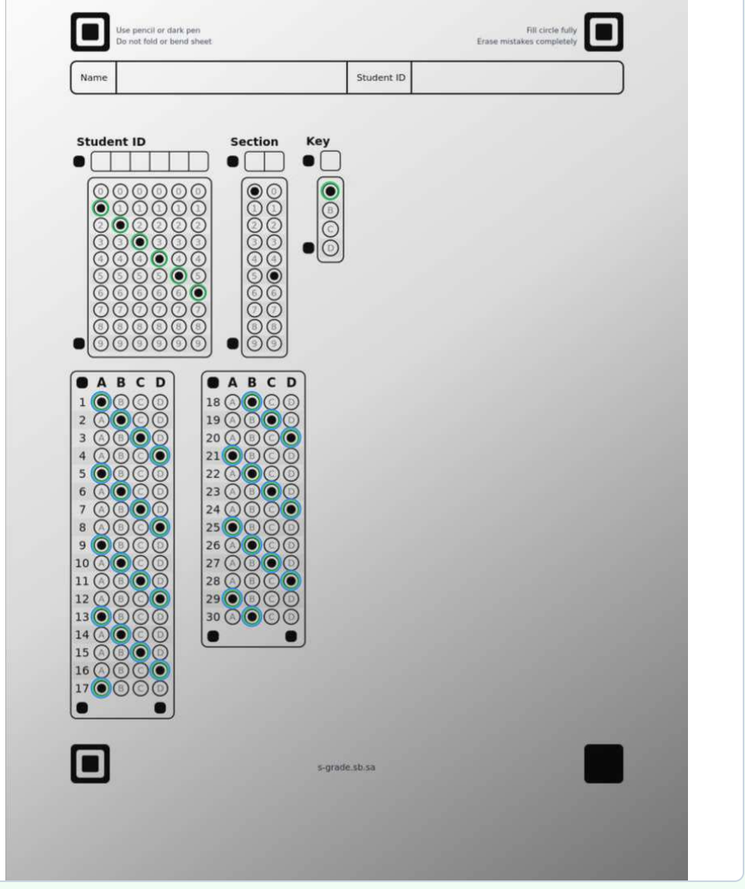
profile: `lighting_gradient → jpeg_q50` · 414 passed · 0 failed



INPUT



WARPED



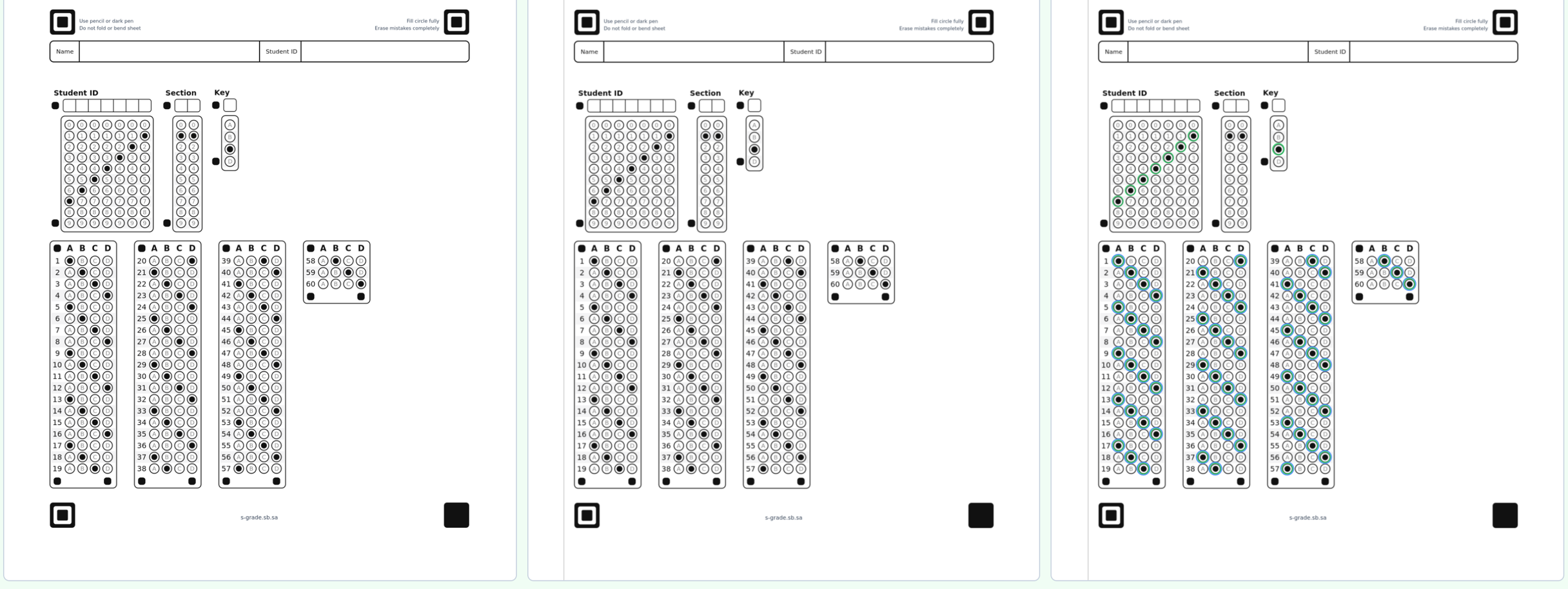
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

result.json

60q · split margins (H=5,V=25) · pristine PASS

profile: `pristine` · 674 passed · 0 failed



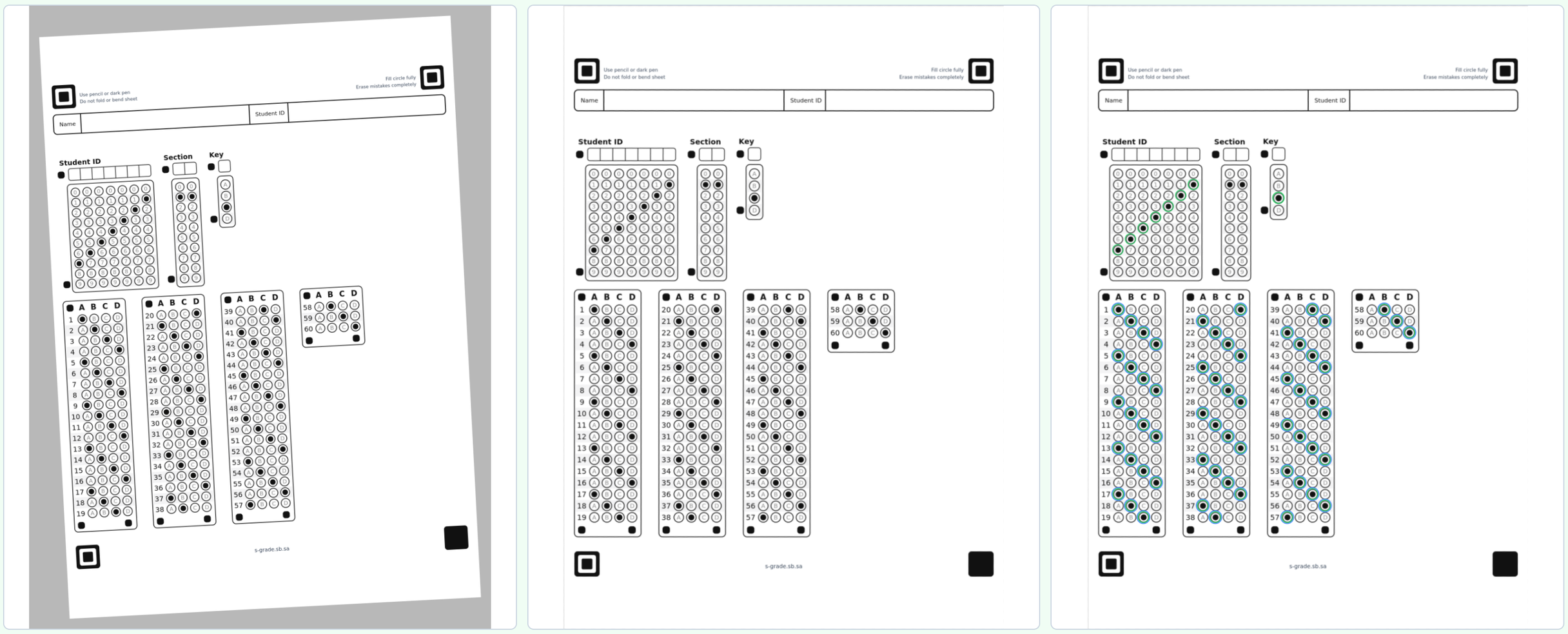
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`7654321`	`7654321`	✓
form	`C`	`C`	✓
section	`11`	`11`	✓
score	`60`	`60`	✓

result.json

60q · split margins · rotation -3deg PASS

profile: `rotated_neg3deg` · 674 passed · 0 failed



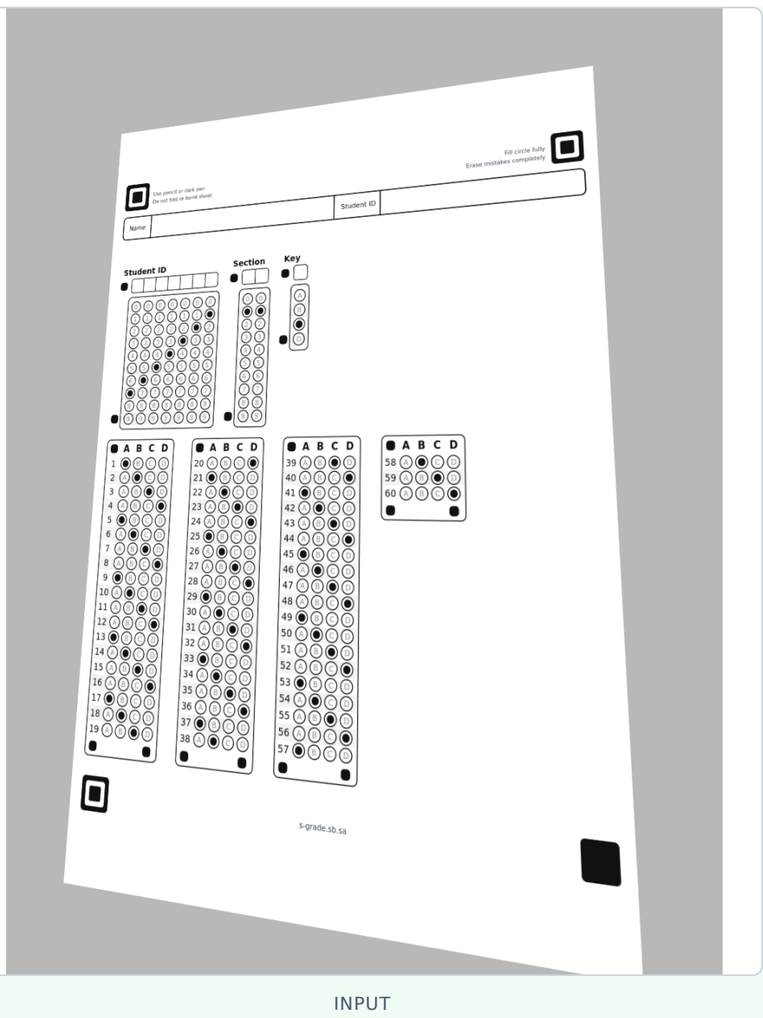
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`7654321`	`7654321`	✓
form	`C`	`C`	✓
section	`11`	`11`	✓
score	`60`	`60`	✓

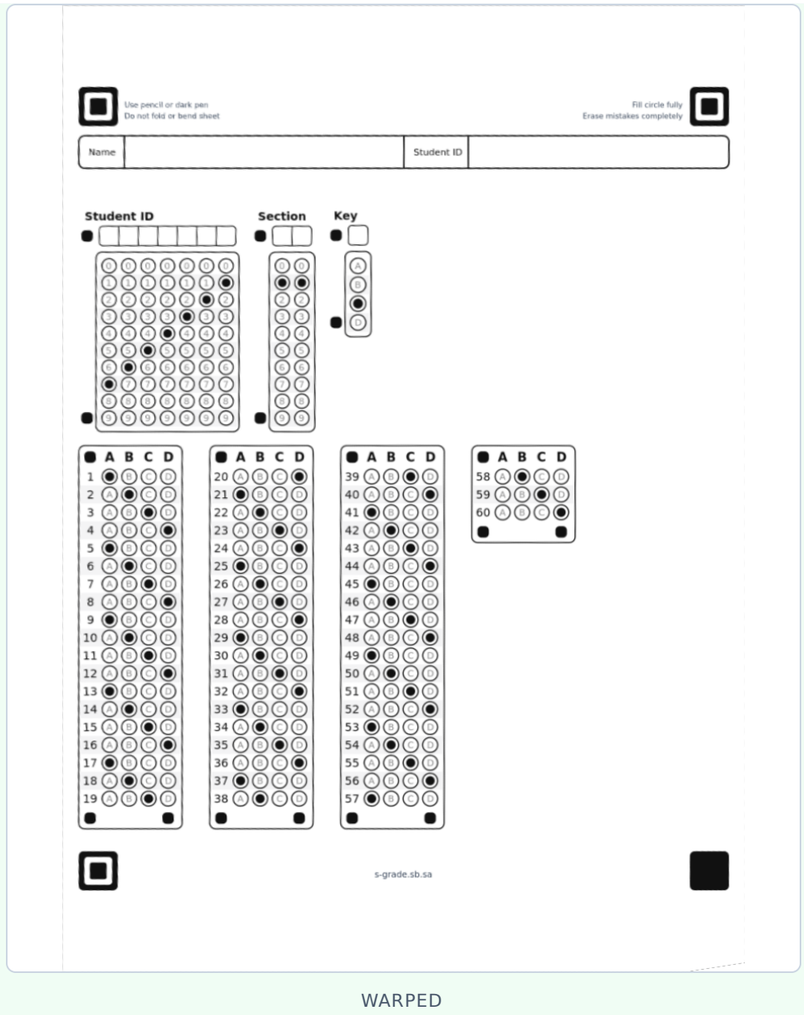
result.json

60q · split margins · perspective strong PASS

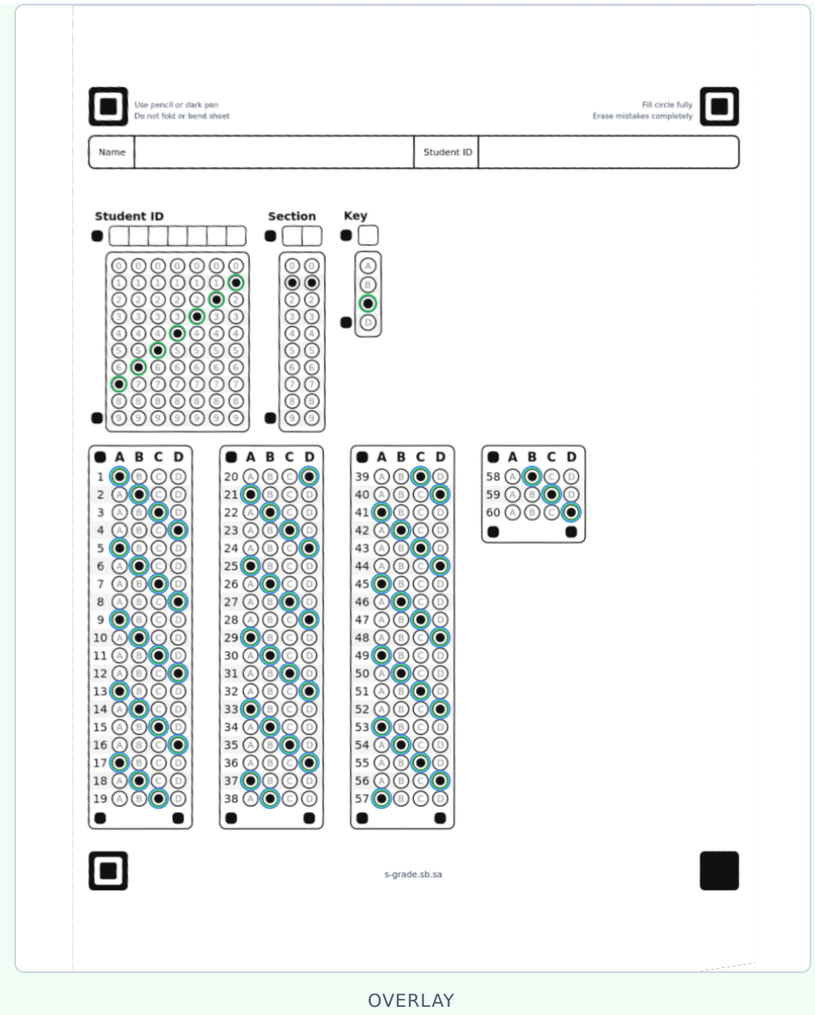
profile: `perspective_strong` · 674 passed · 0 failed



INPUT



WARPED



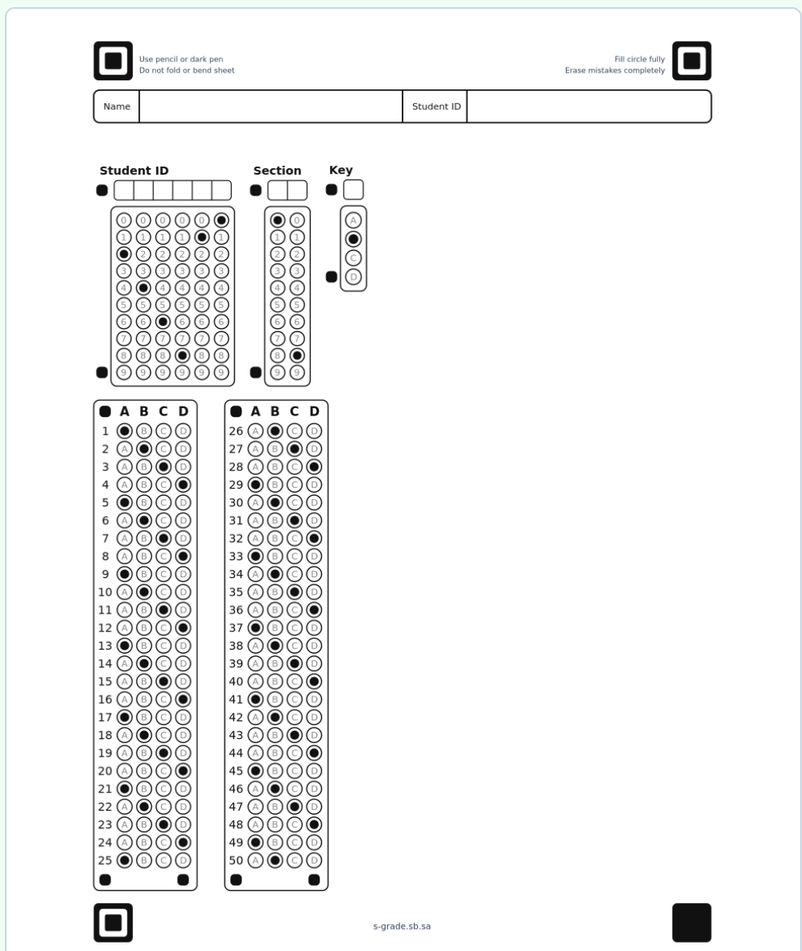
OVERLAY

field	expected	actual	
studentId	`7654321`	`7654321`	✓
form	`C`	`C`	✓
section	`11`	`11`	✓
score	`60`	`60`	✓

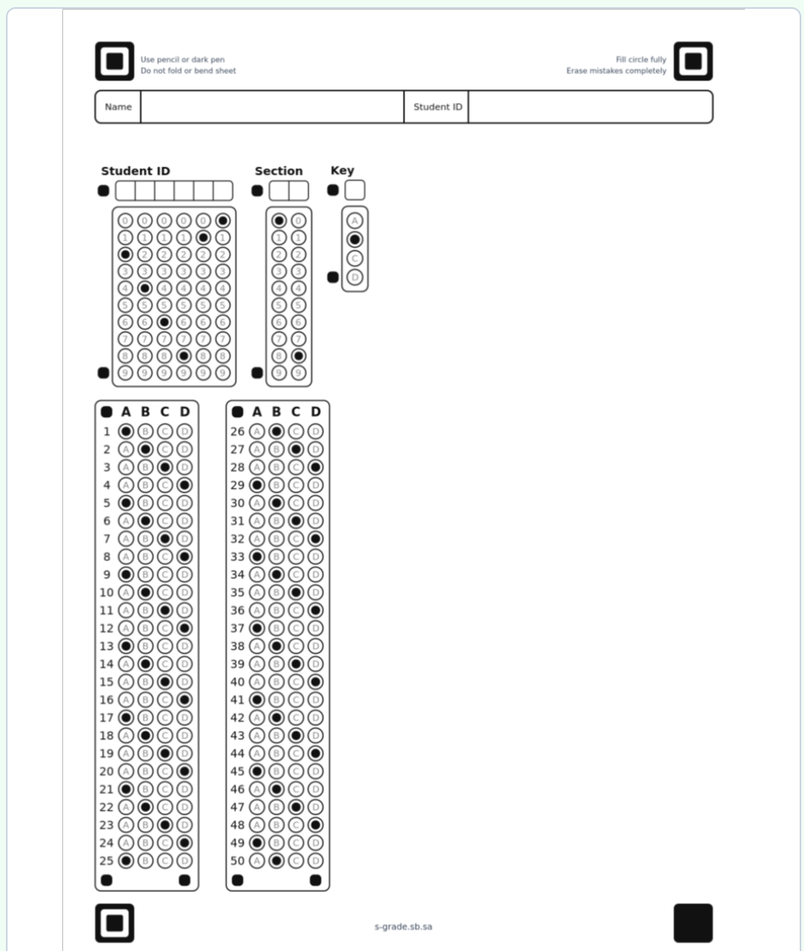
result.json

50q · no alt rows · pristine PASS

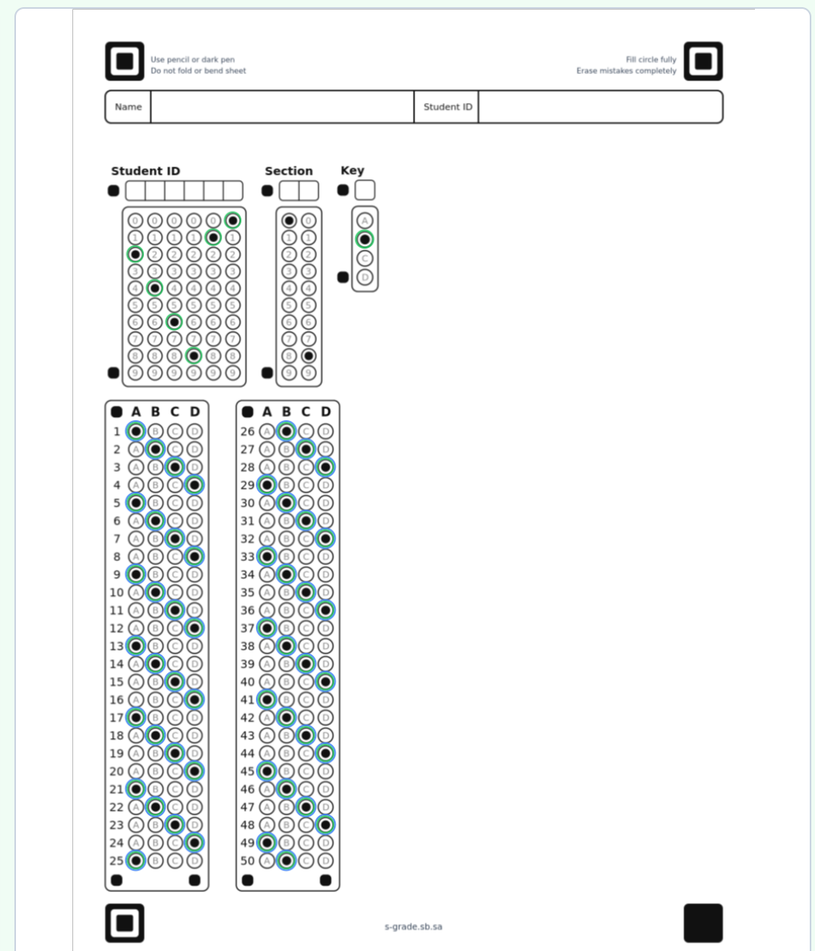
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



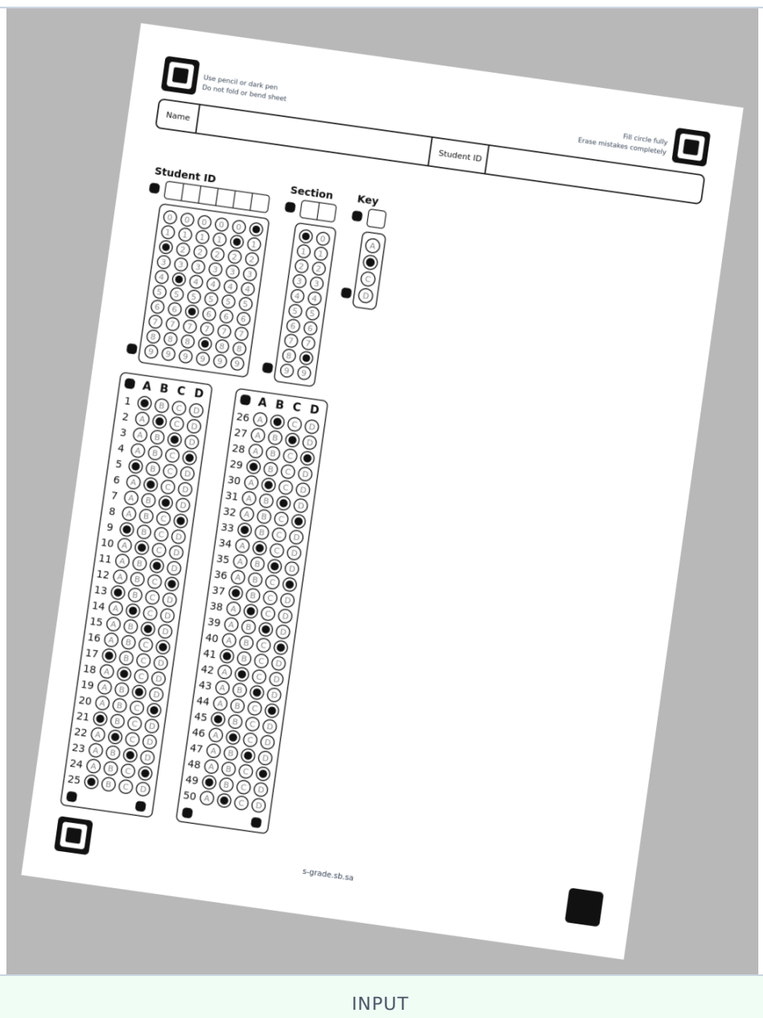
OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

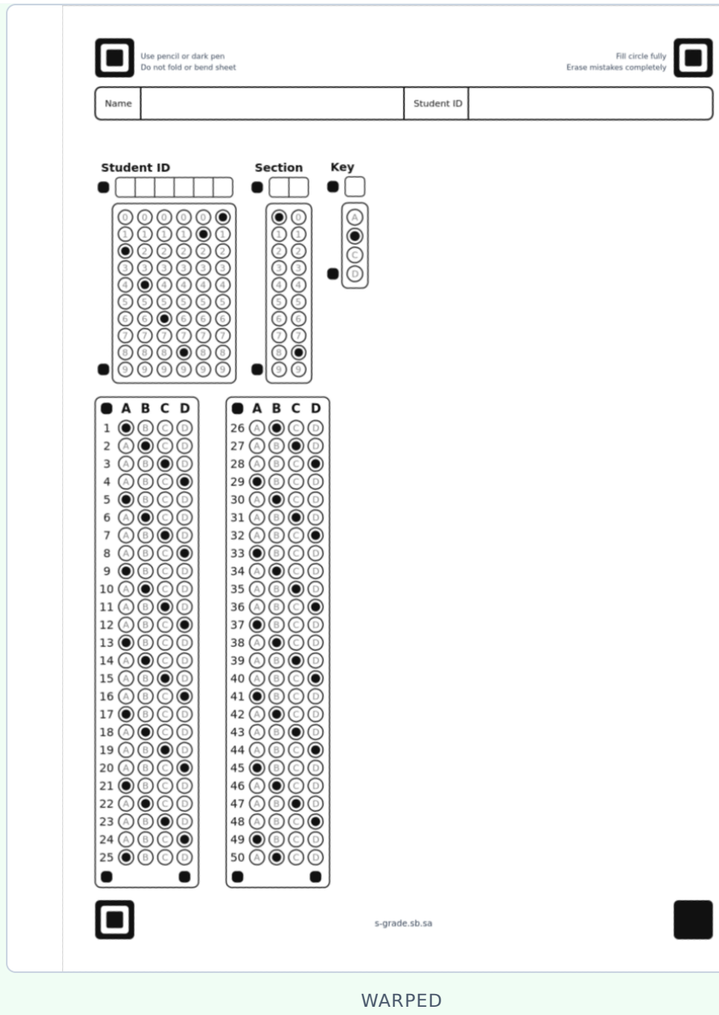
result.json

50q · no alt rows · rotation 8deg PASS

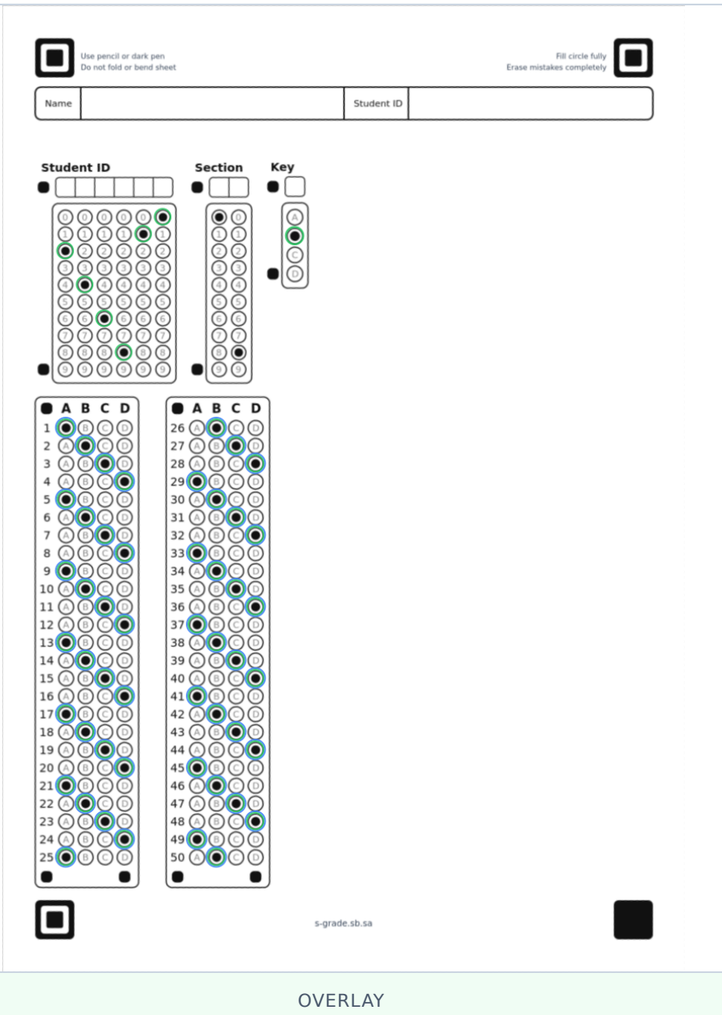
profile: `rotated_8deg` · 574 passed · 0 failed



INPUT



WARPED



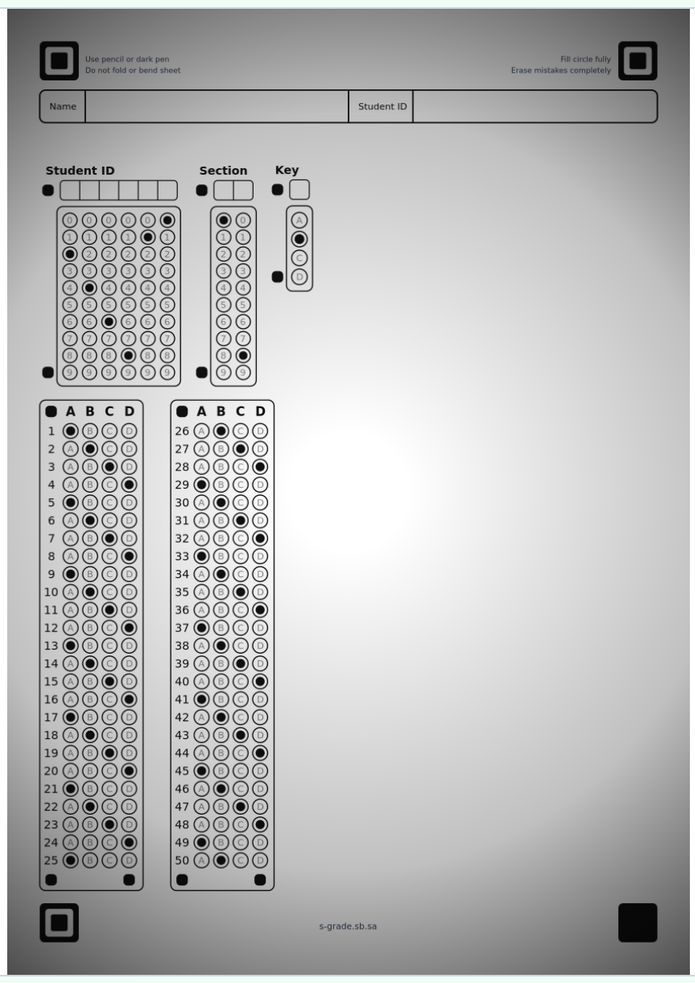
OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

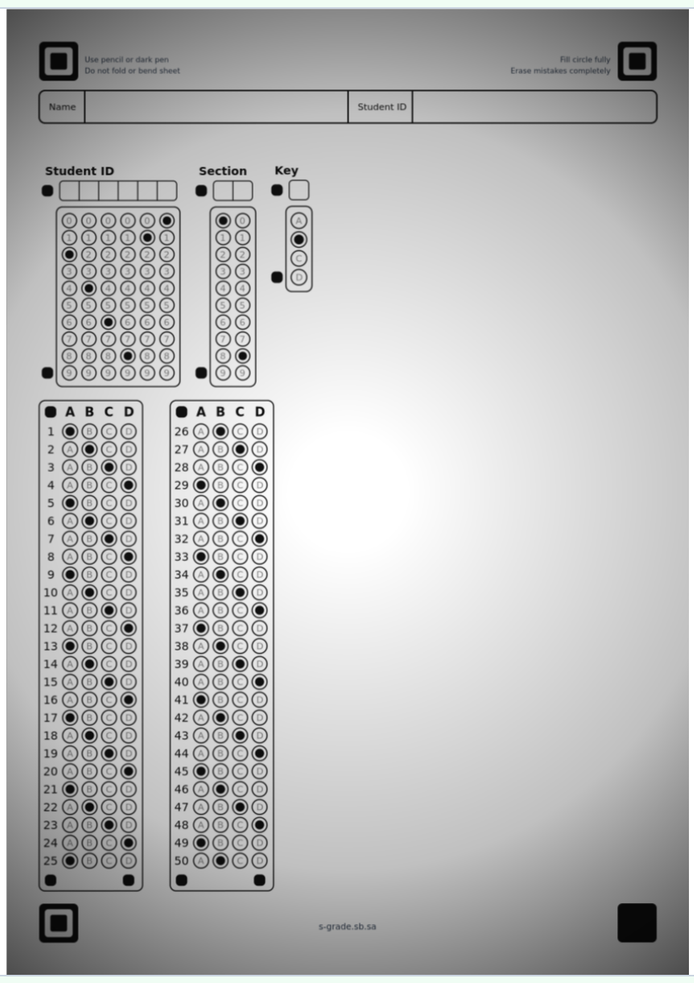
result.json

50q · no alt rows · lighting vignette PASS

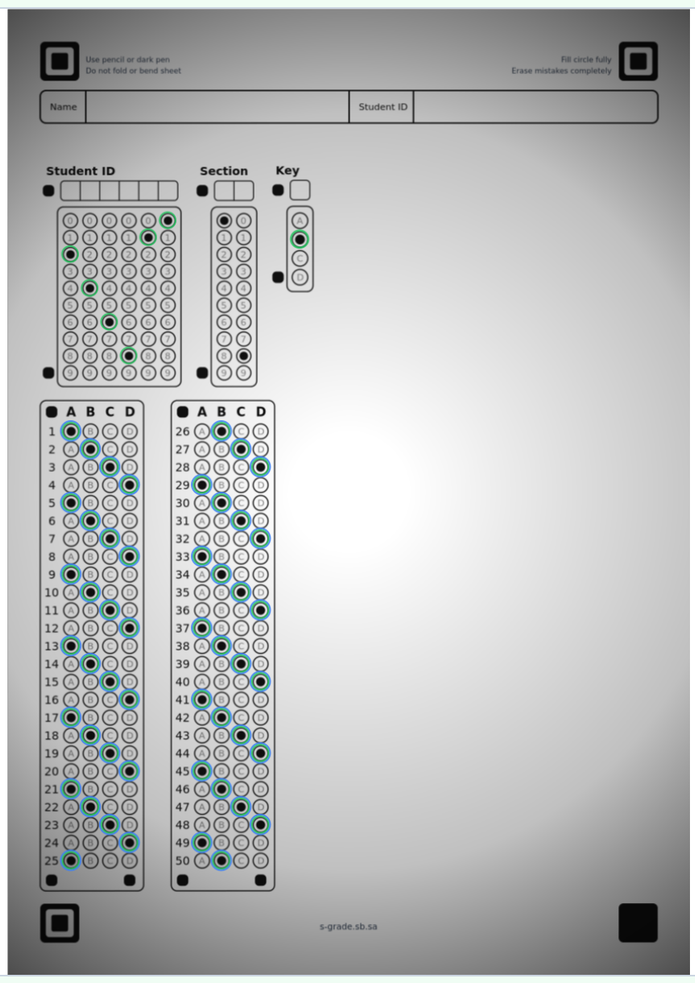
profile: `lighting_vignette` · 574 passed · 0 failed



INPUT



WARPED



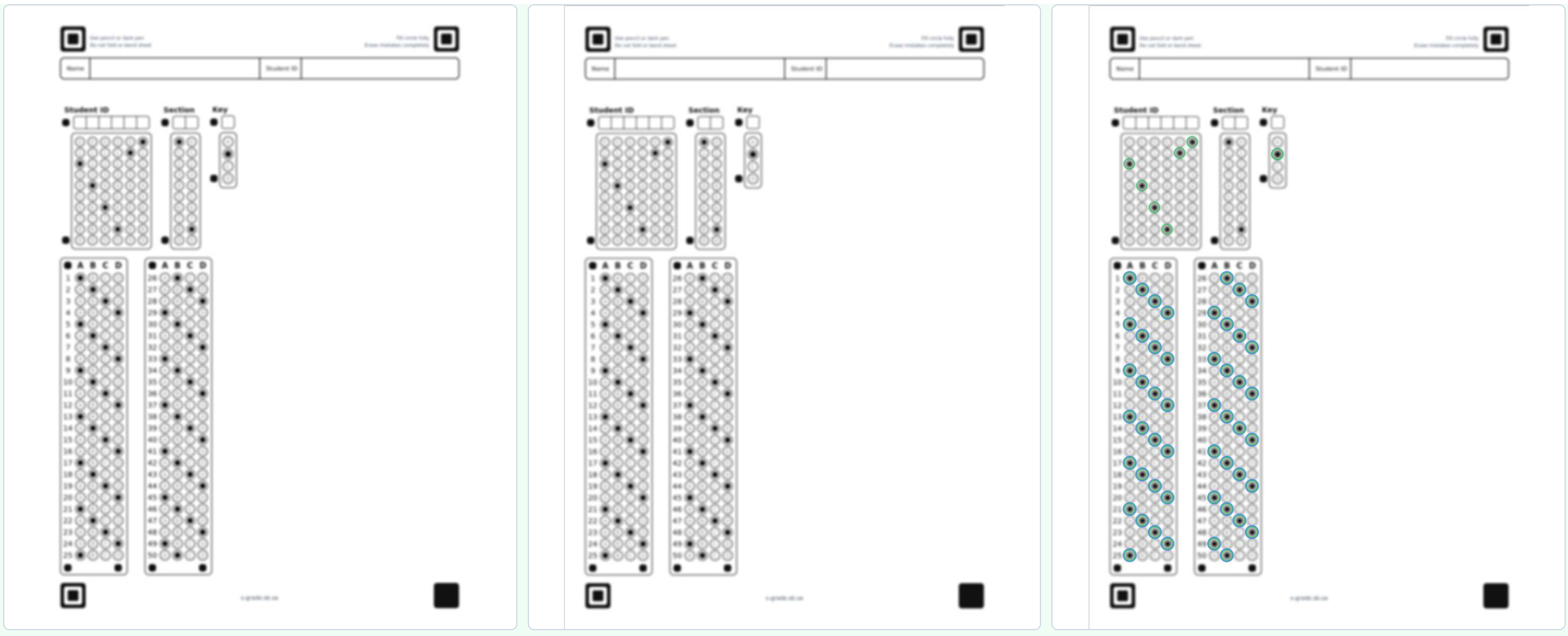
OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

result.json

50q · no alt rows · out of focus PASS

profile: `out_of_focus` · 574 passed · 0 failed



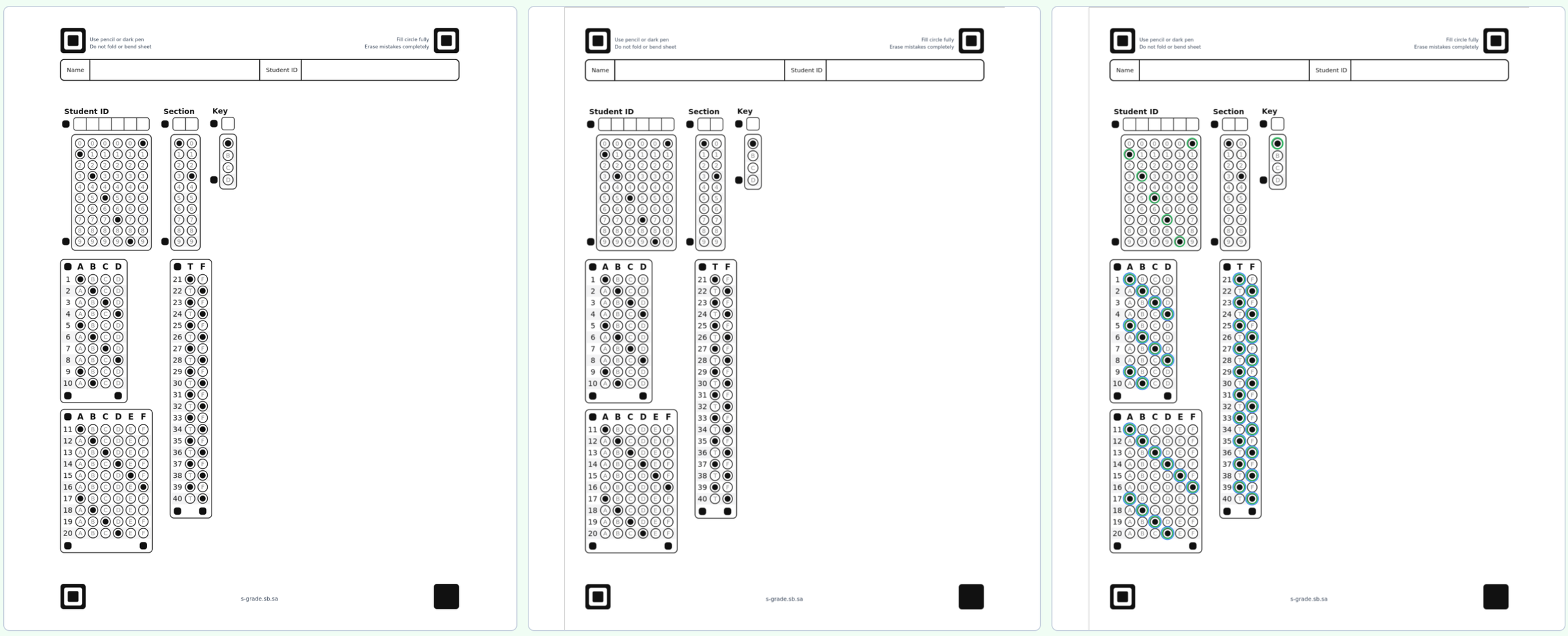
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

result.json

40q · mixed groups (A-D + A-F + T,F) · pristine PASS

profile: `pristine` · 454 passed · 0 failed



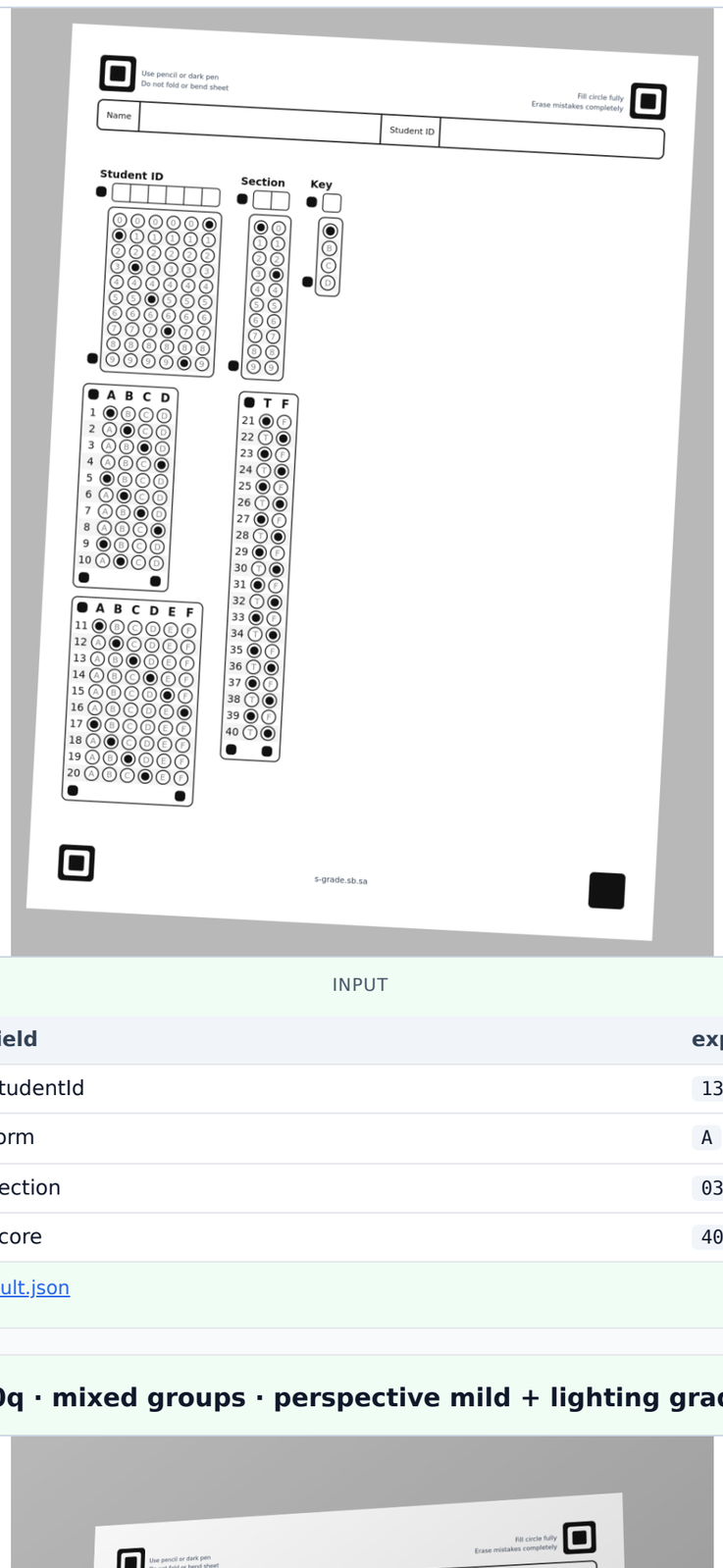
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

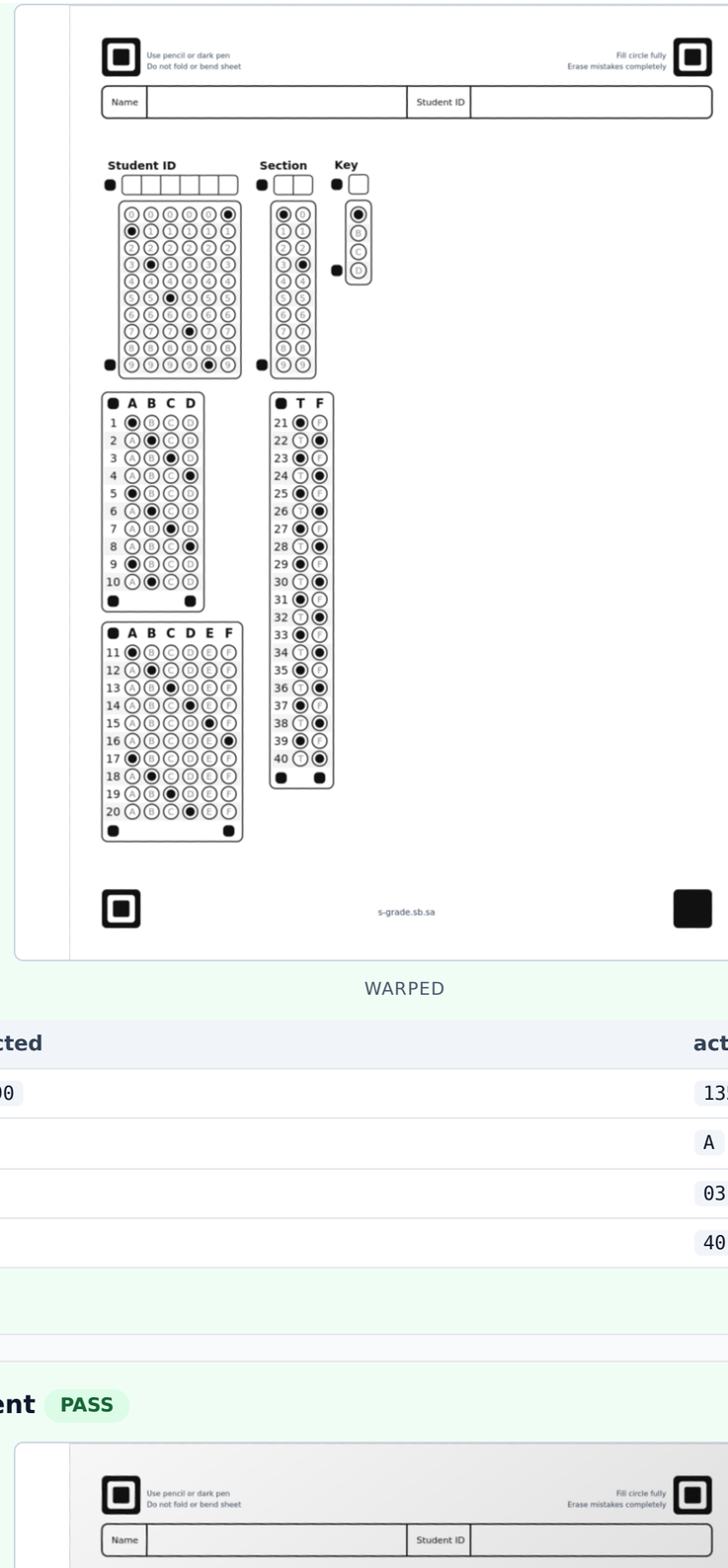
result.json

40q · mixed groups · rotation 3deg PASS

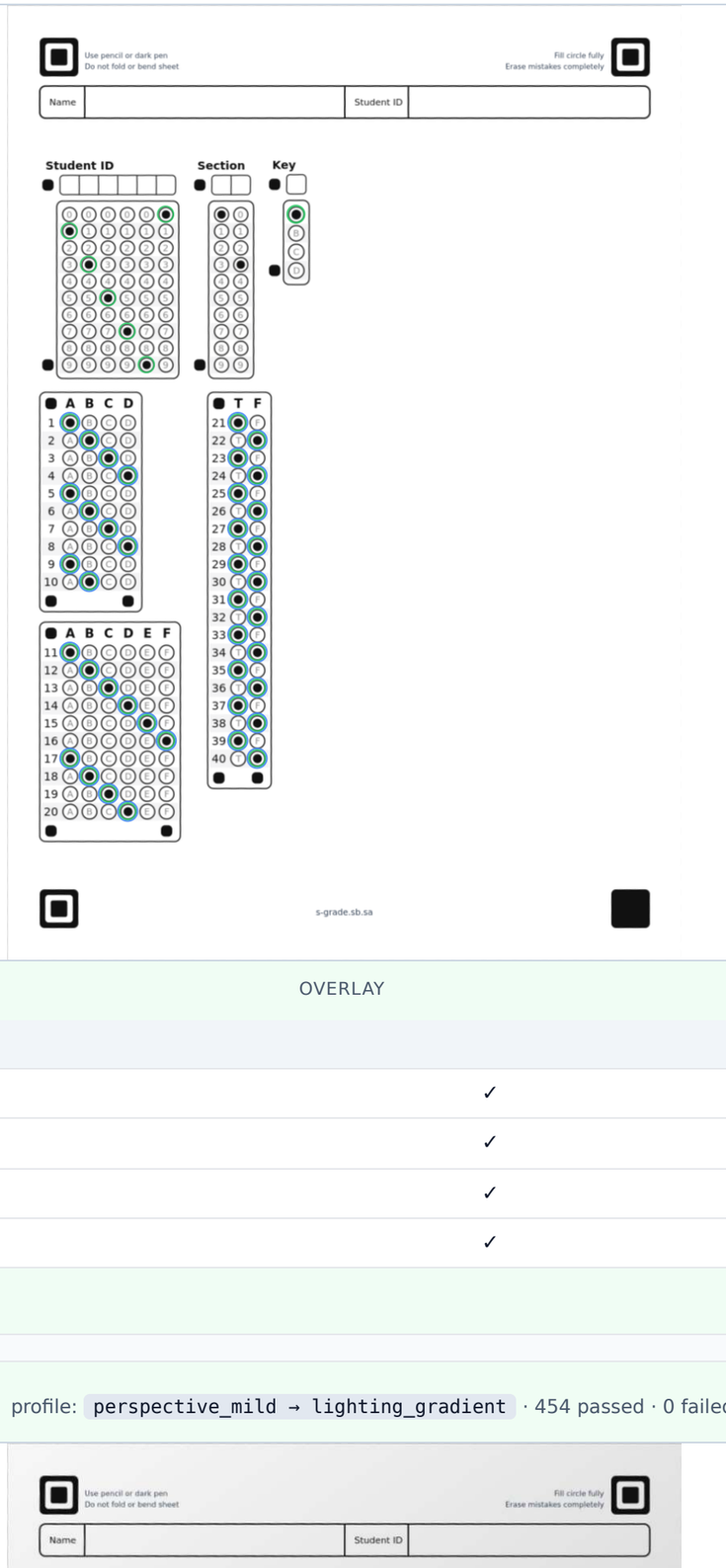
profile: `rotated_3deg` · 454 passed · 0 failed



INPUT



WARPED



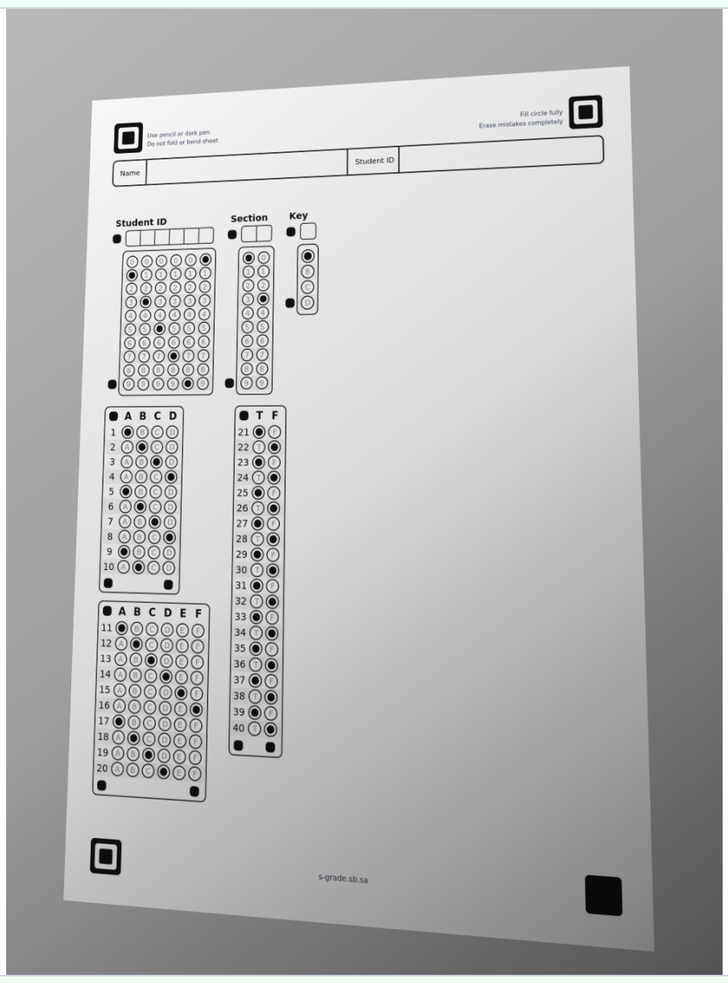
OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

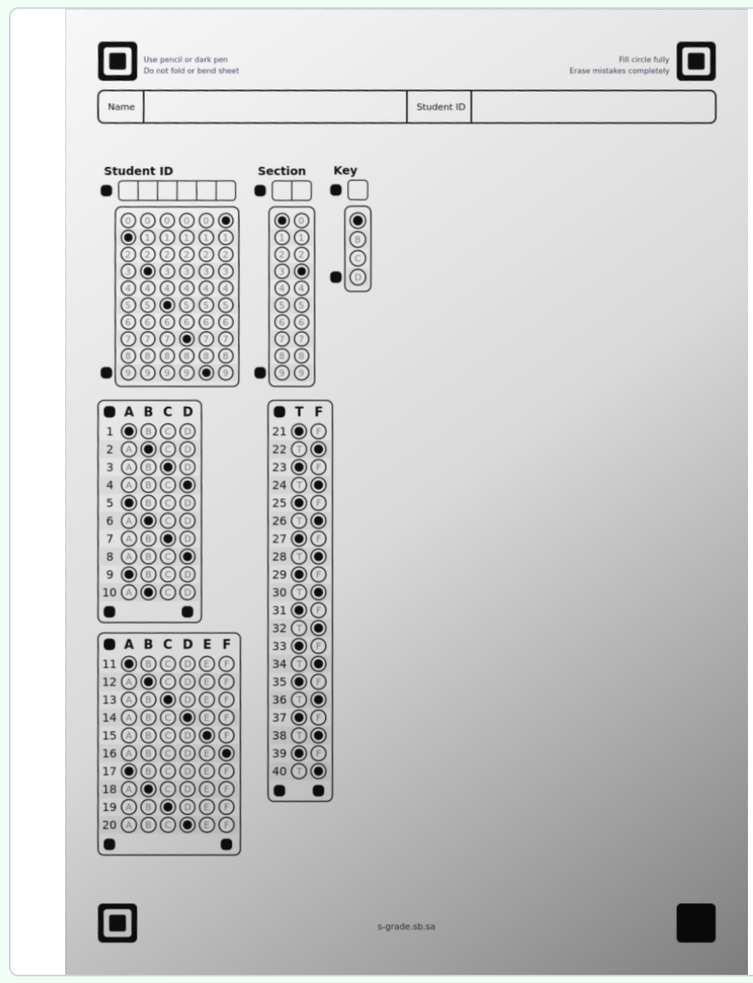
result.json

40q · mixed groups · perspective mild + lighting gradient PASS

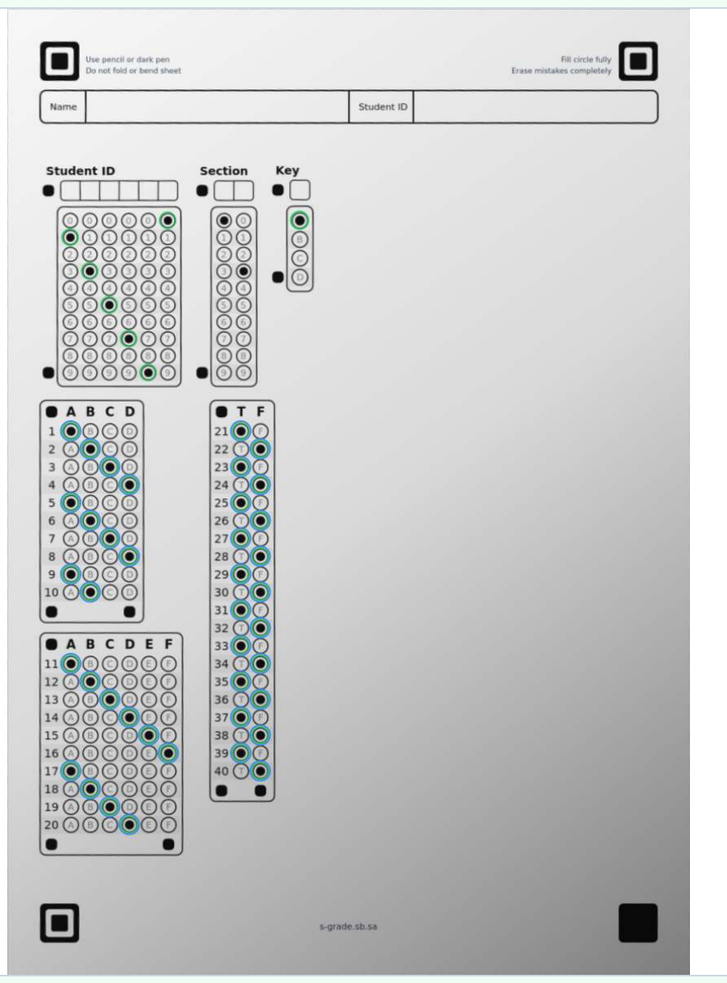
profile: `perspective_mild → lighting_gradient` · 454 passed · 0 failed



INPUT



WARPED



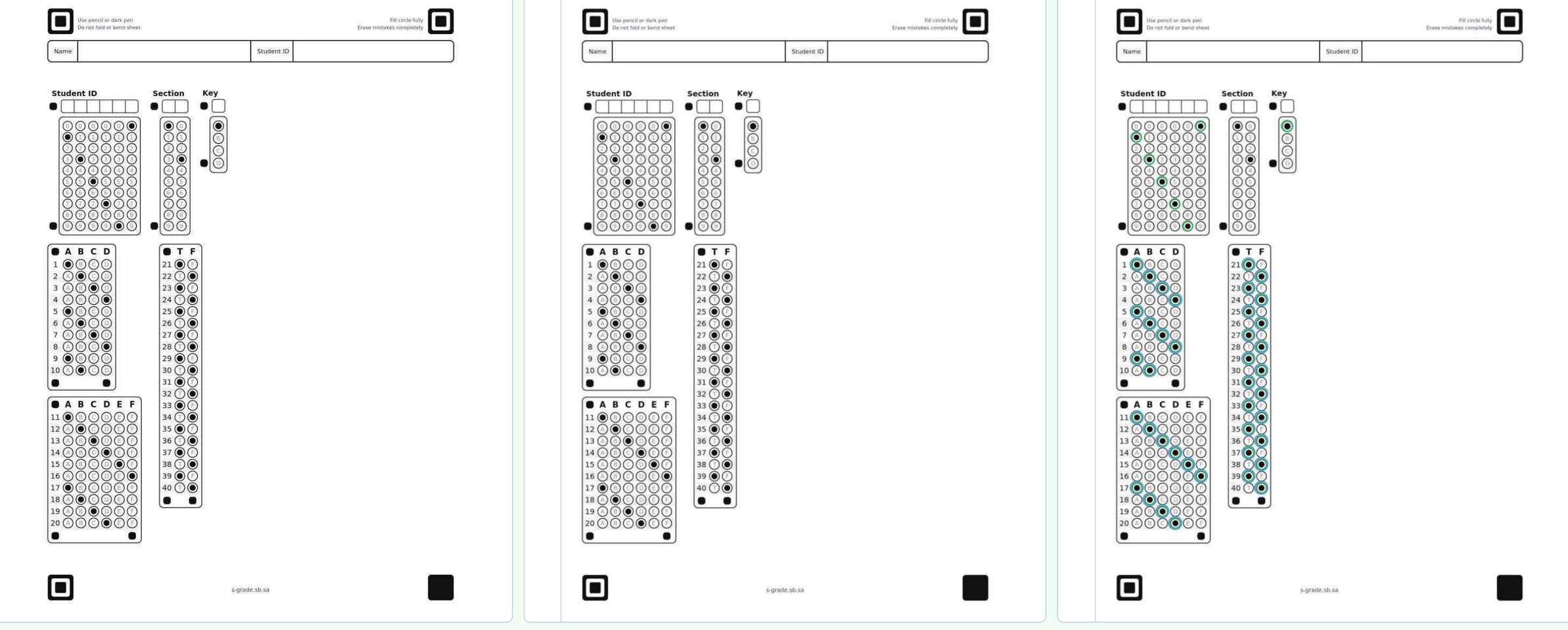
OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

result.json

40q · mixed groups · jpeg q30 PASS

profile: `jpeg_q30` · 454 passed · 0 failed



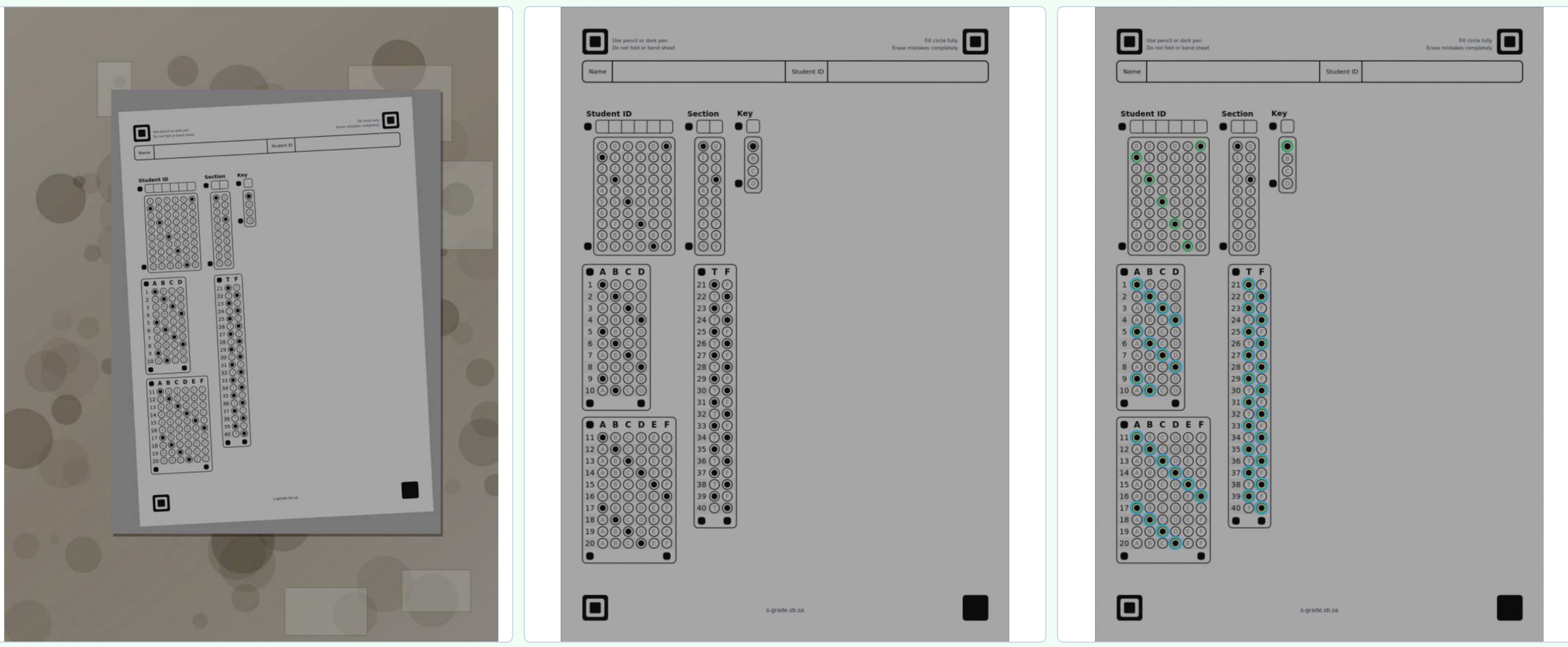
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

result.json

40q · mixed groups · scene cluttered dark PASS

profile: `scene_cluttered_dark` · 454 passed · 0 failed



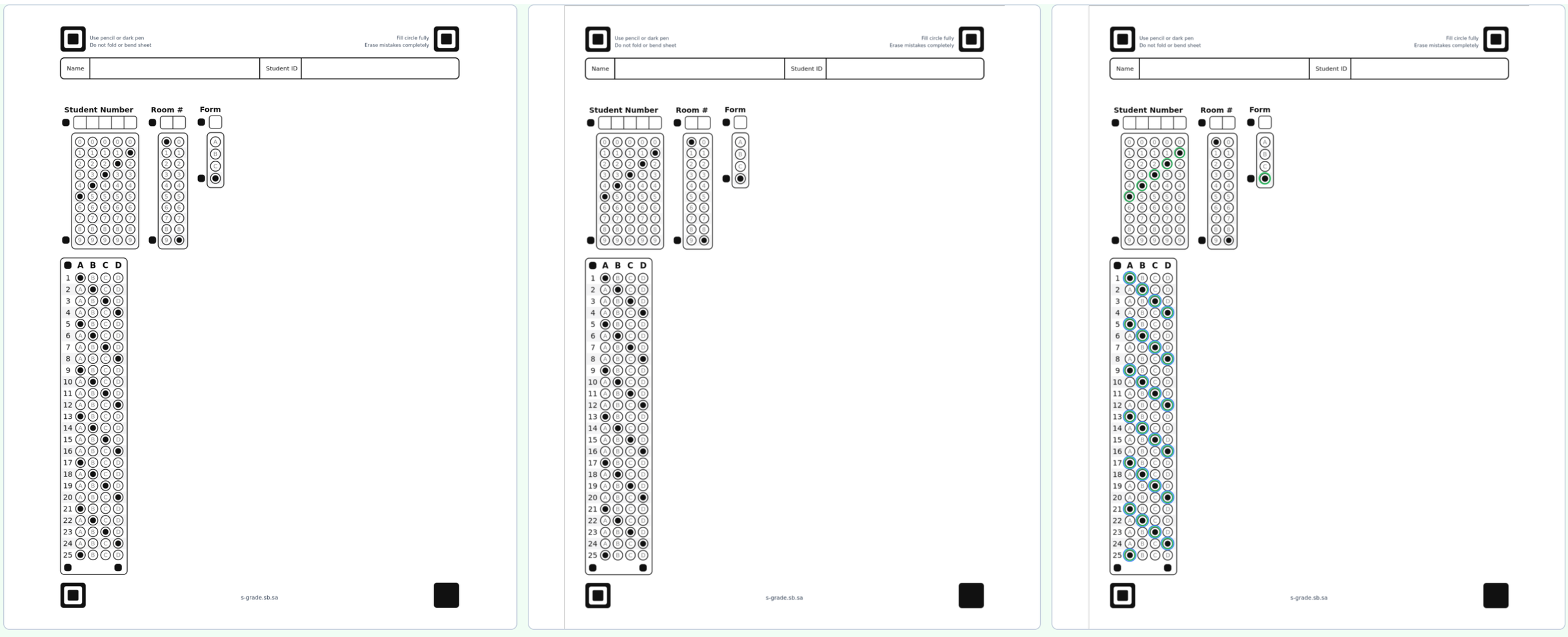
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

result.json

25q · custom zone titles · pristine PASS

profile: `pristine` · 354 passed · 0 failed



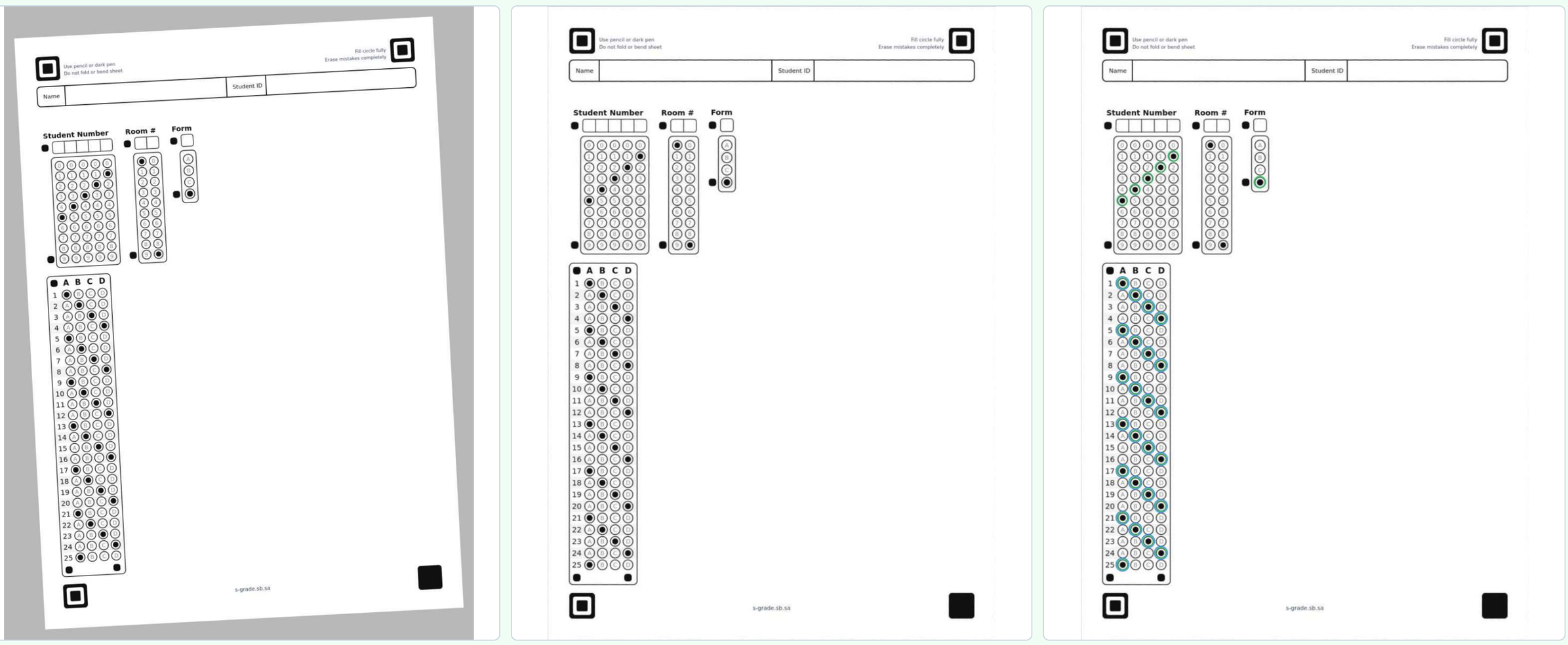
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`54321`	`54321`	✓
form	`D`	`D`	✓
section	`09`	`09`	✓
score	`25`	`25`	✓

result.json

25q · custom zone titles · rotation -3deg + jpeg PASS

profile: `rotated_neg3deg → jpeg_q50` · 354 passed · 0 failed



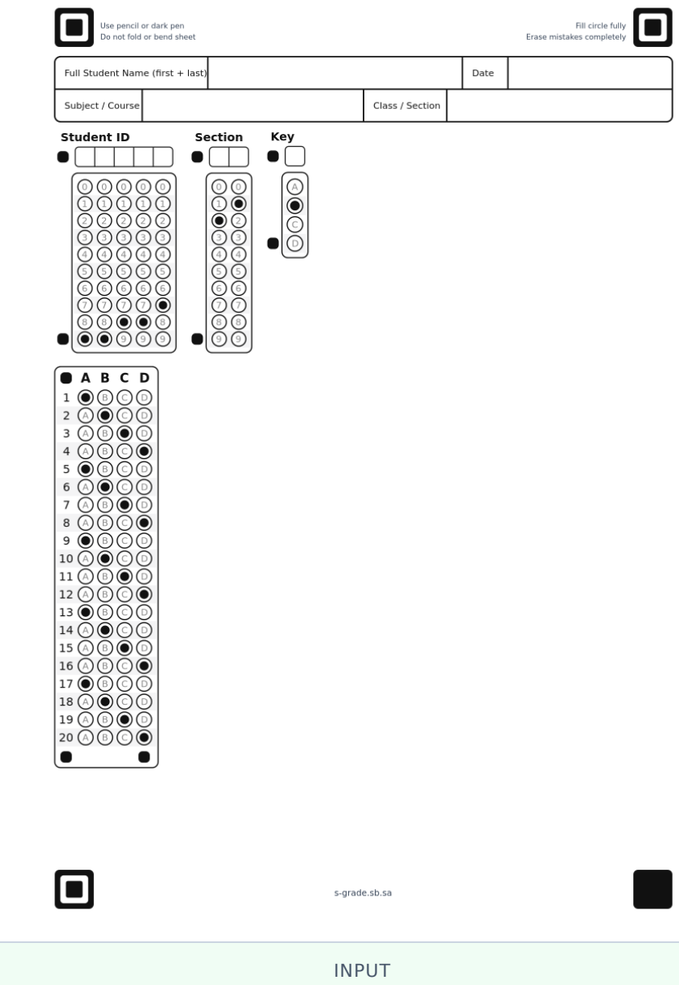
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`54321`	`54321`	✓
form	`D`	`D`	✓
section	`09`	`09`	✓
score	`25`	`25`	✓

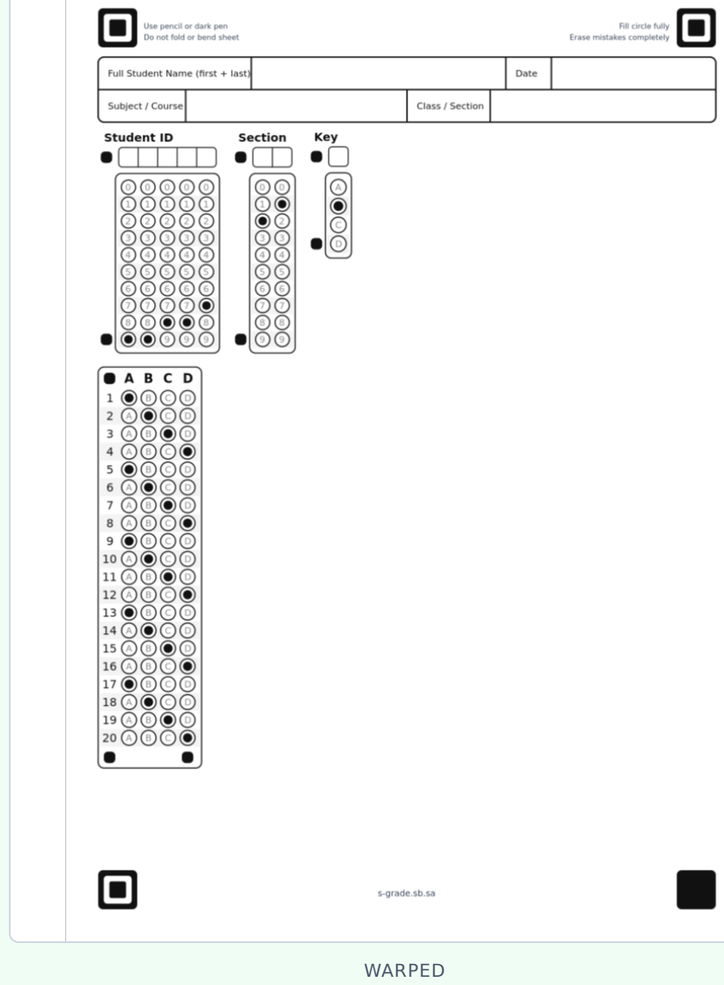
result.json

20q · custom header fields · pristine PASS

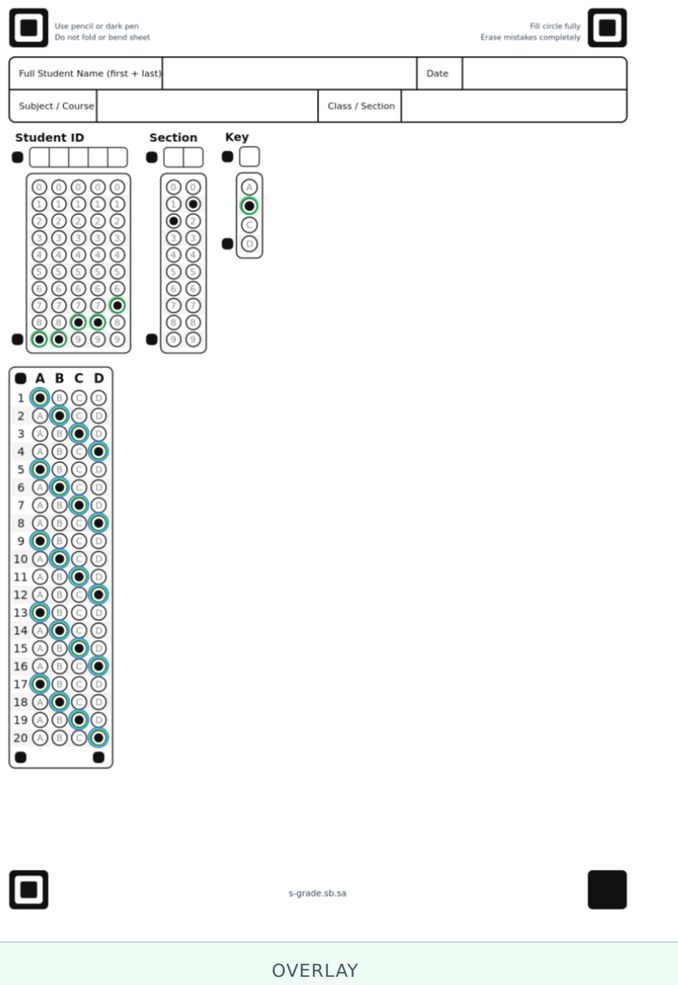
profile: `pristine` · 314 passed · 0 failed



INPUT



WARPED



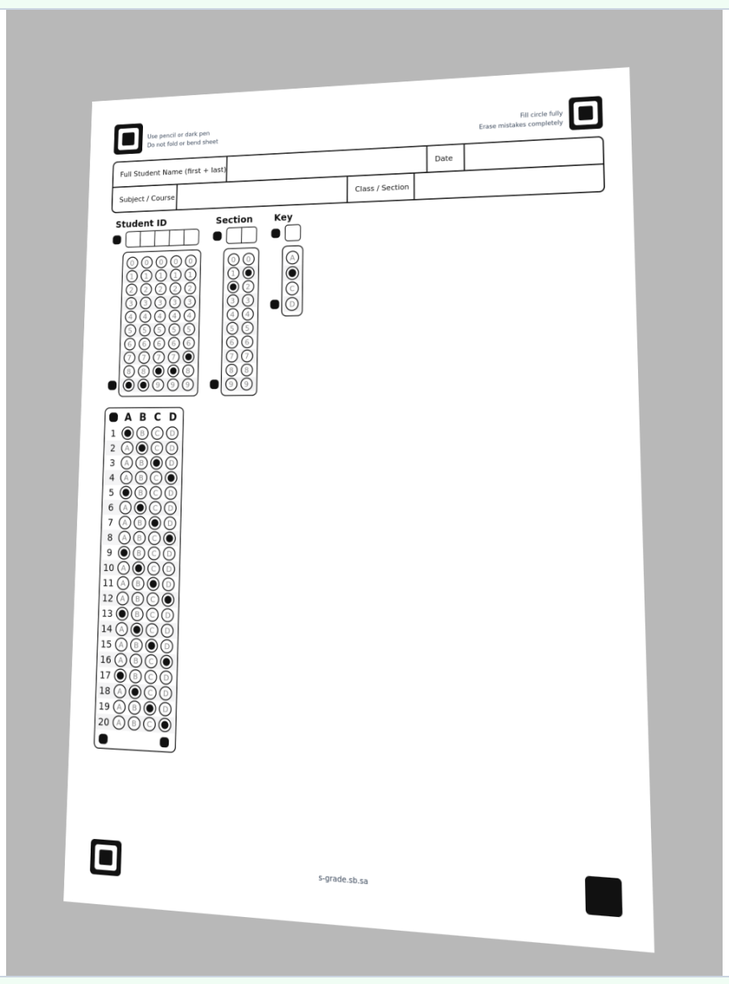
OVERLAY

field	expected	actual	
studentId	`99887`	`99887`	✓
form	`B`	`B`	✓
section	`21`	`21`	✓
score	`20`	`20`	✓

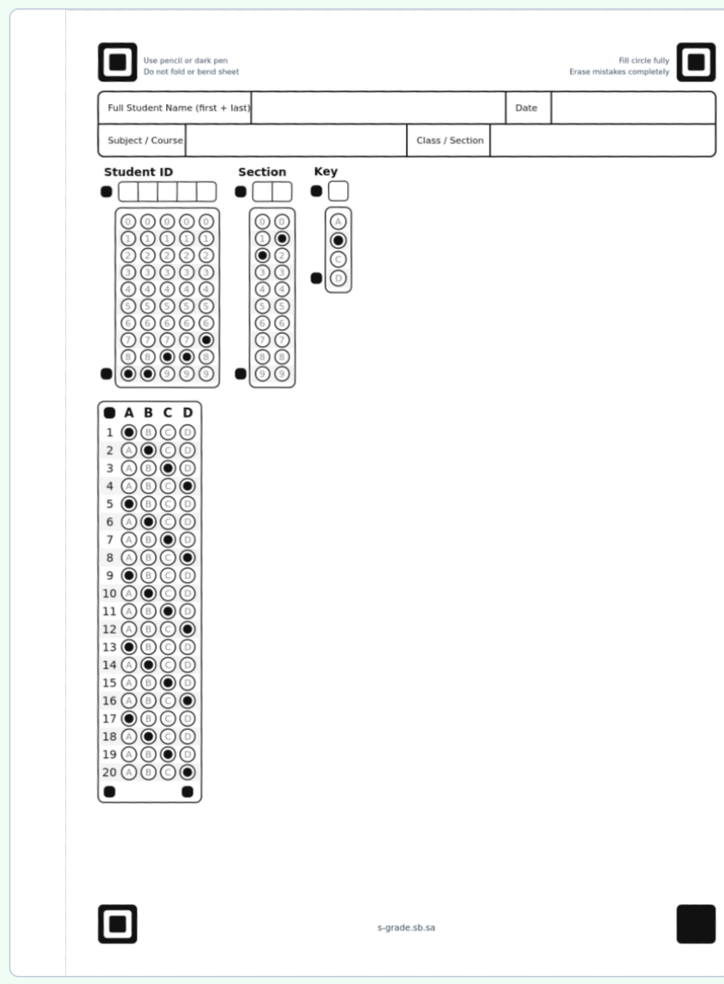
result.json

20q · custom header fields · perspective mild PASS

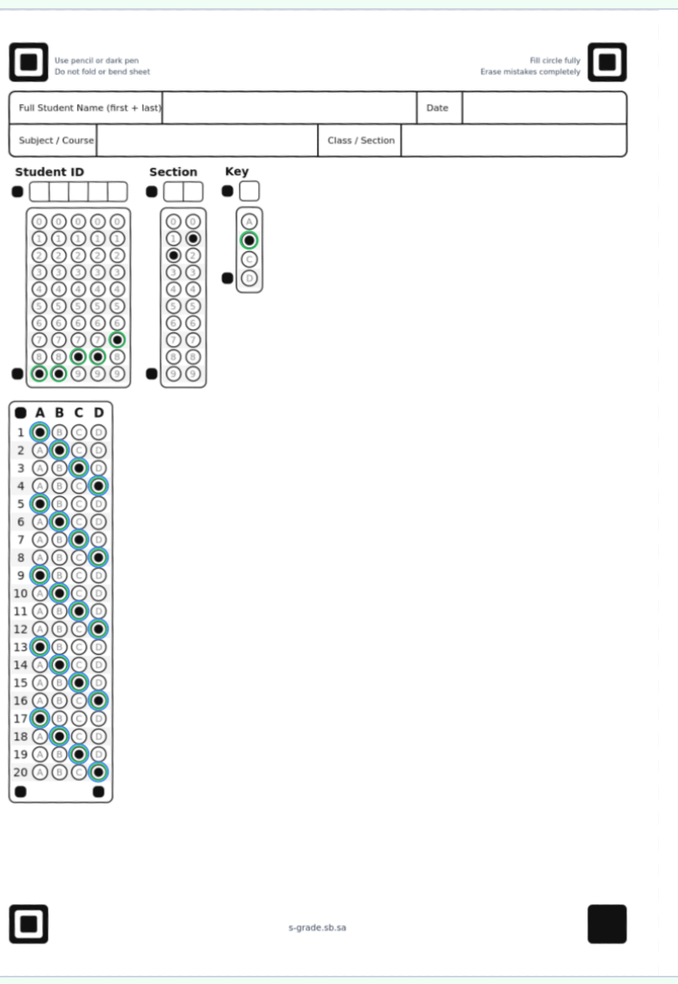
profile: `perspective_mild` · 314 passed · 0 failed



INPUT



WARPED



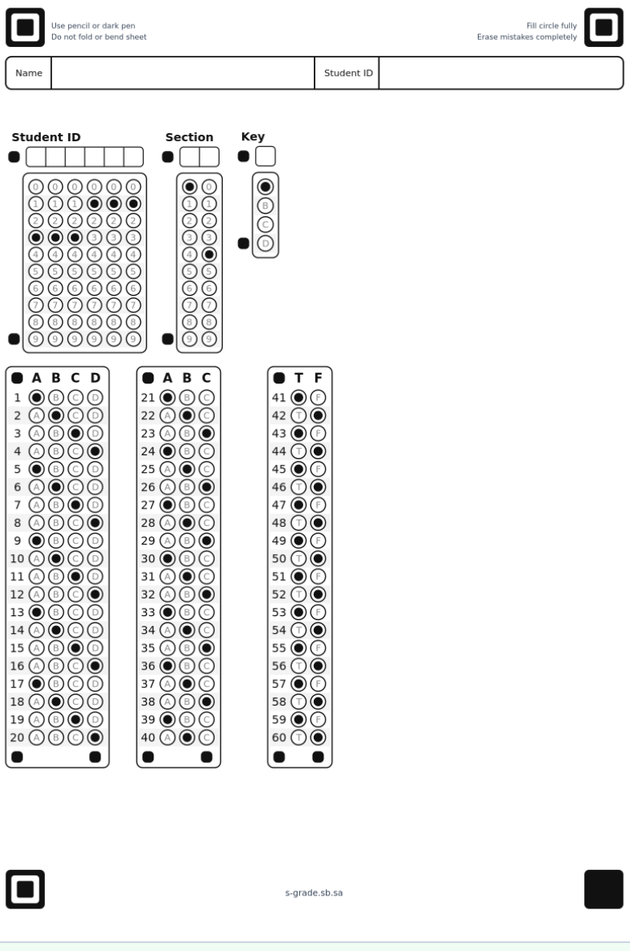
OVERLAY

field	expected	actual	
studentId	`99887`	`99887`	✓
form	`B`	`B`	✓
section	`21`	`21`	✓
score	`20`	`20`	✓

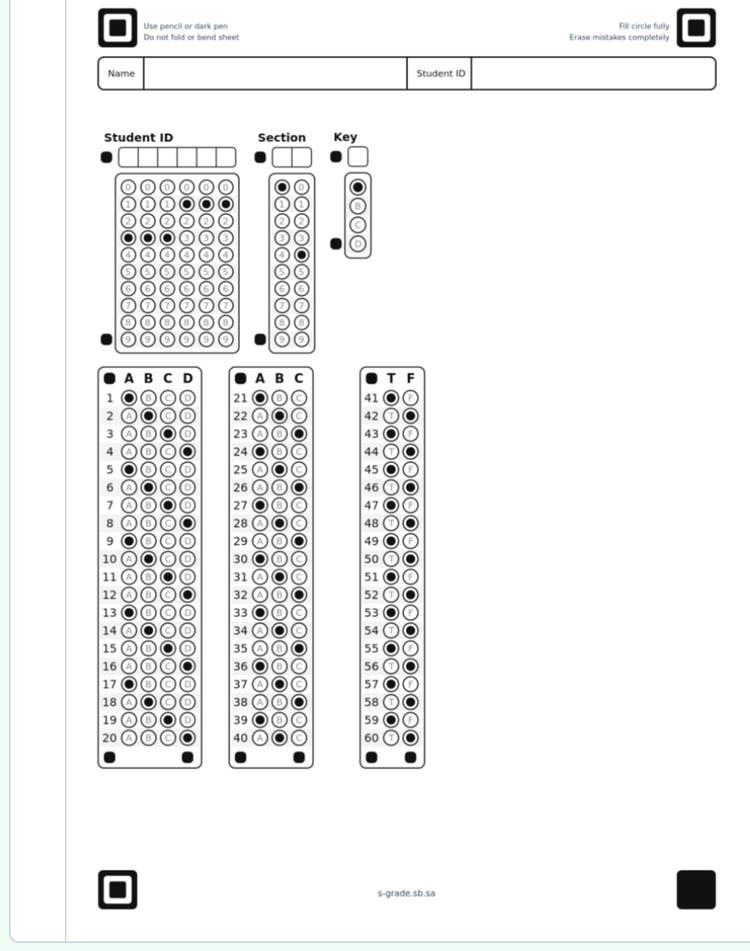
result.json

60q · mixed groups large (A-D + A-C + T,F) · pristine PASS

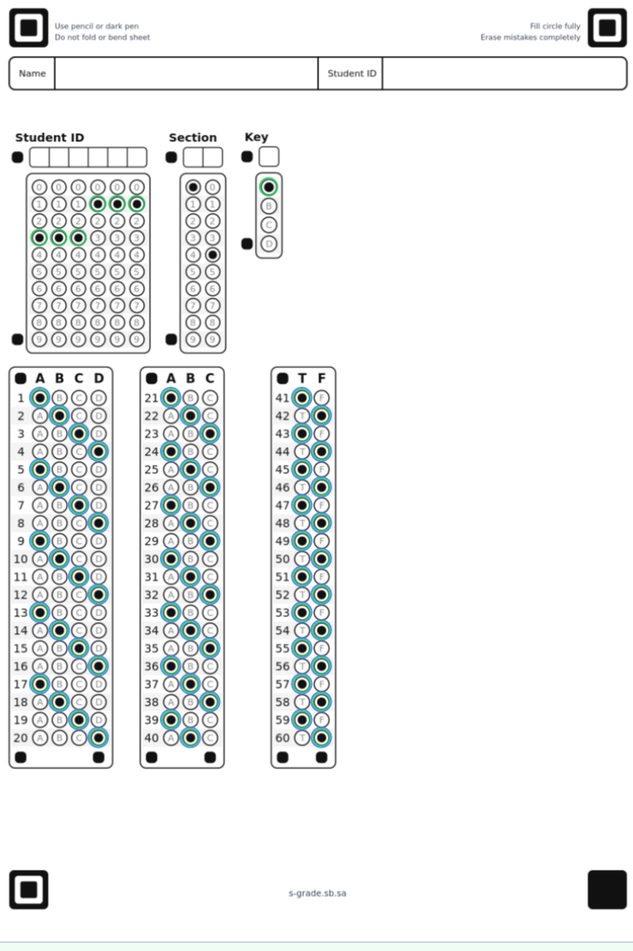
profile: `pristine` · 534 passed · 0 failed



INPUT



WARPED



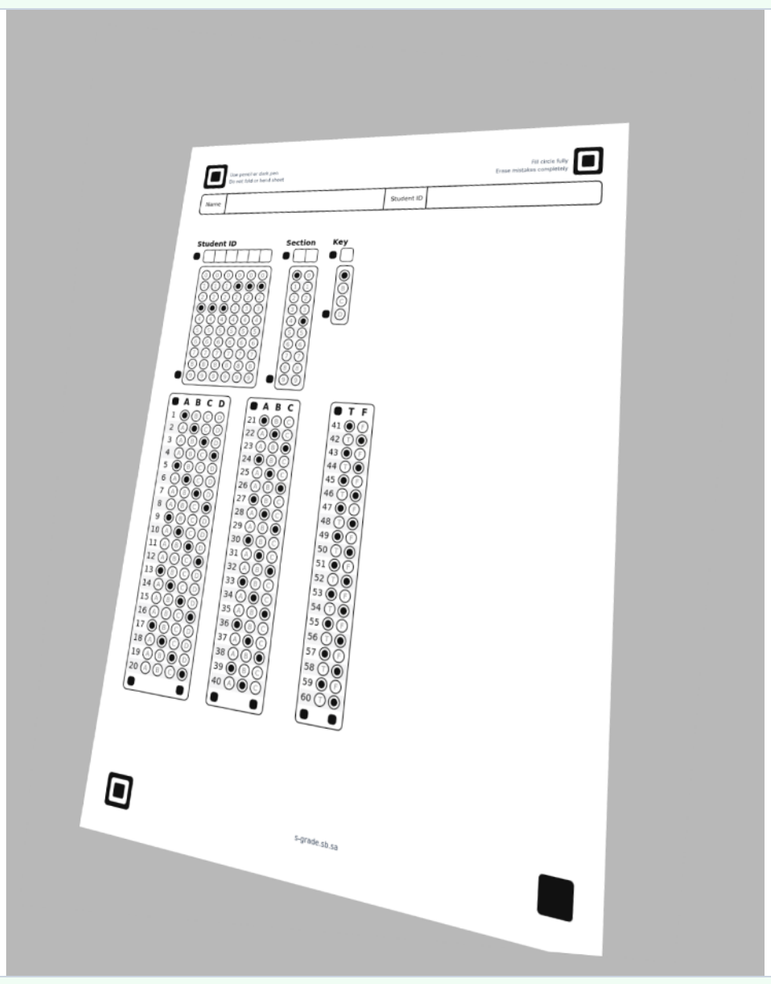
OVERLAY

field	expected	actual	
studentId	`333111`	`333111`	✓
form	`A`	`A`	✓
section	`04`	`04`	✓
score	`60`	`60`	✓

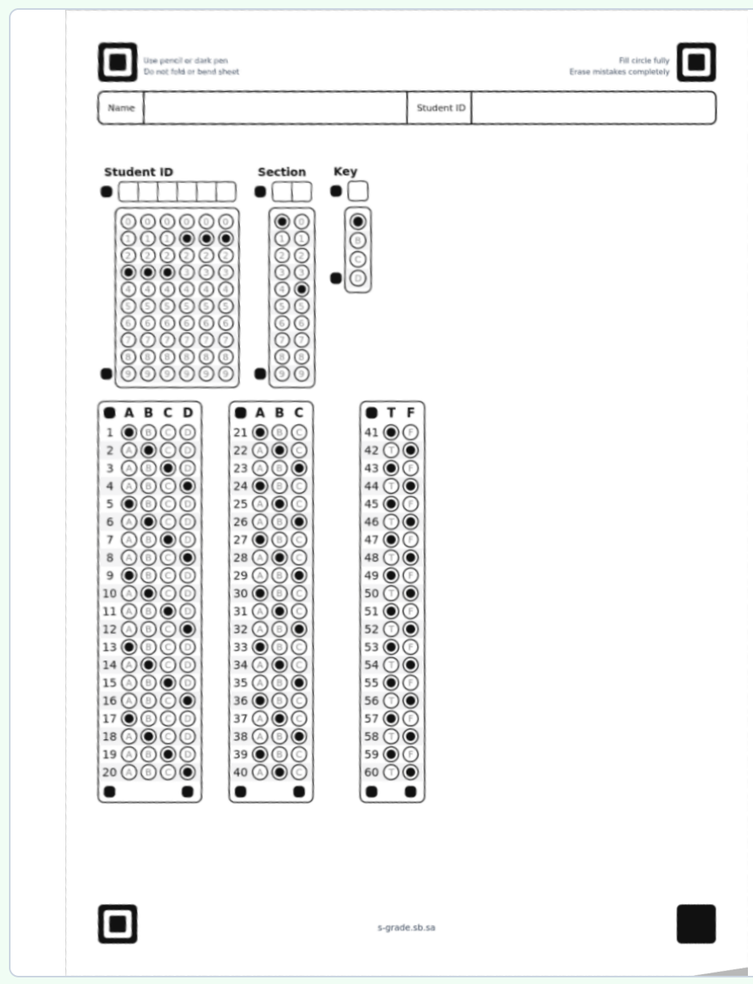
result.json

60q · mixed groups large · tilt combined PASS

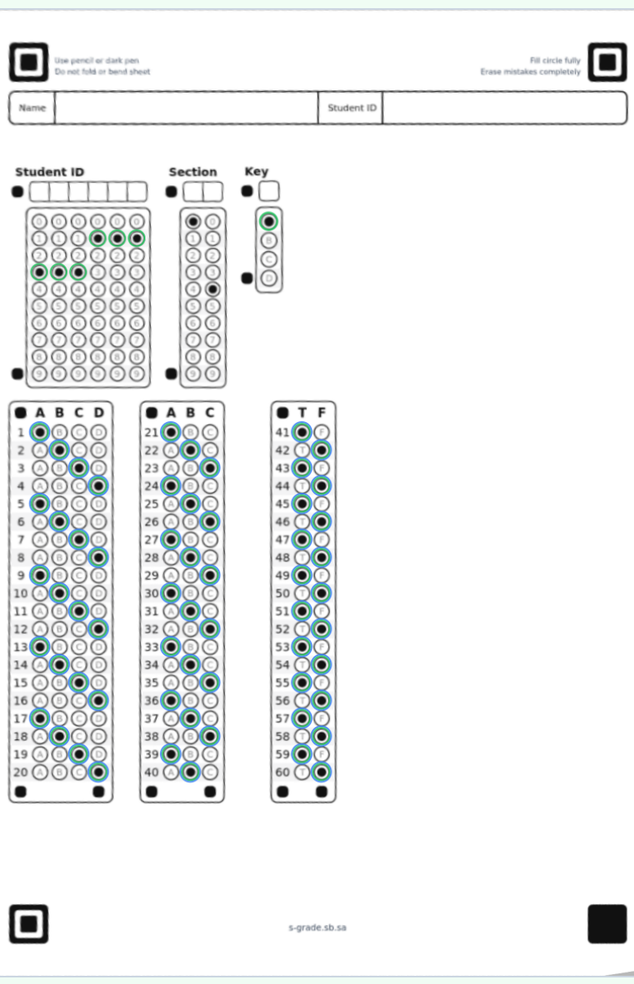
profile: `tilt_combined` · 534 passed · 0 failed



INPUT



WARPED



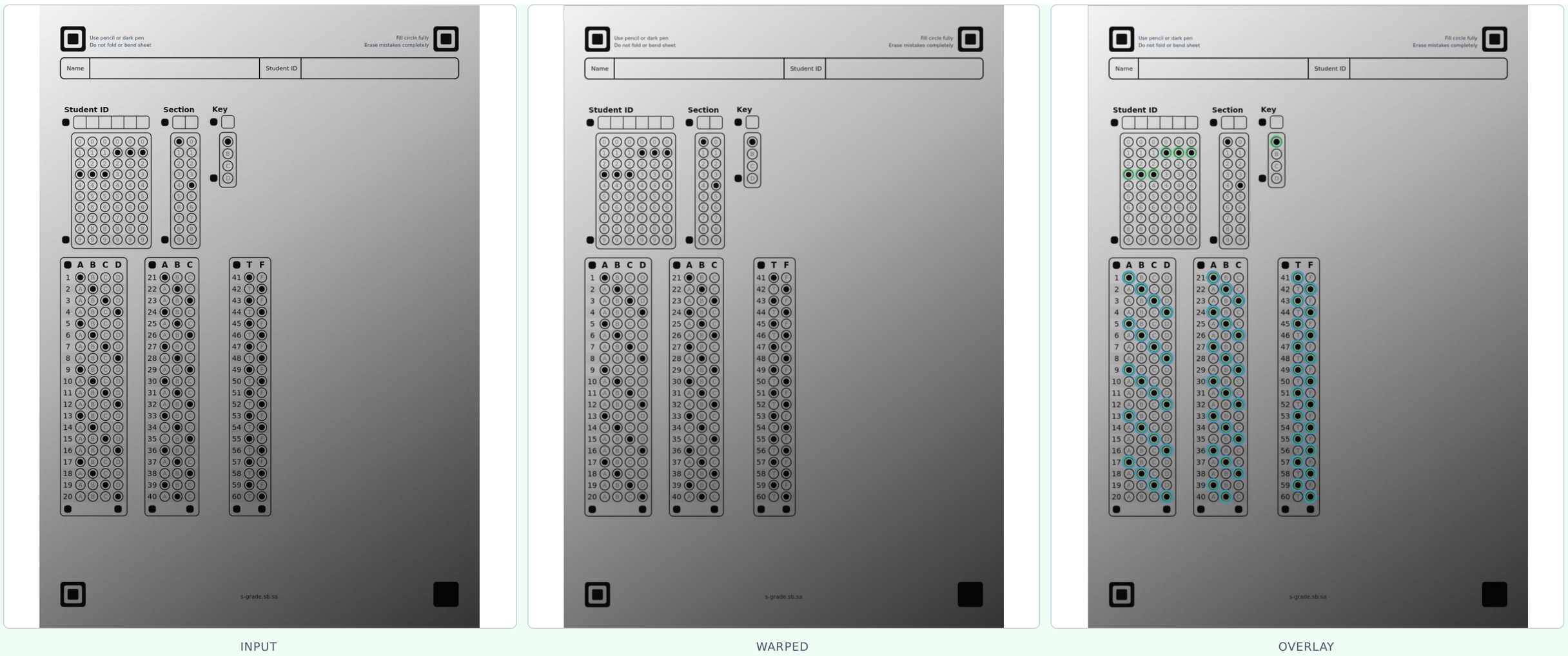
OVERLAY

field	expected	actual	
studentId	`333111`	`333111`	✓
form	`A`	`A`	✓
section	`04`	`04`	✓
score	`60`	`60`	✓

result.json

60q · mixed groups large · lighting heavy gradient PASS

profile: `lighting_heavy_gradient` · 534 passed · 0 failed



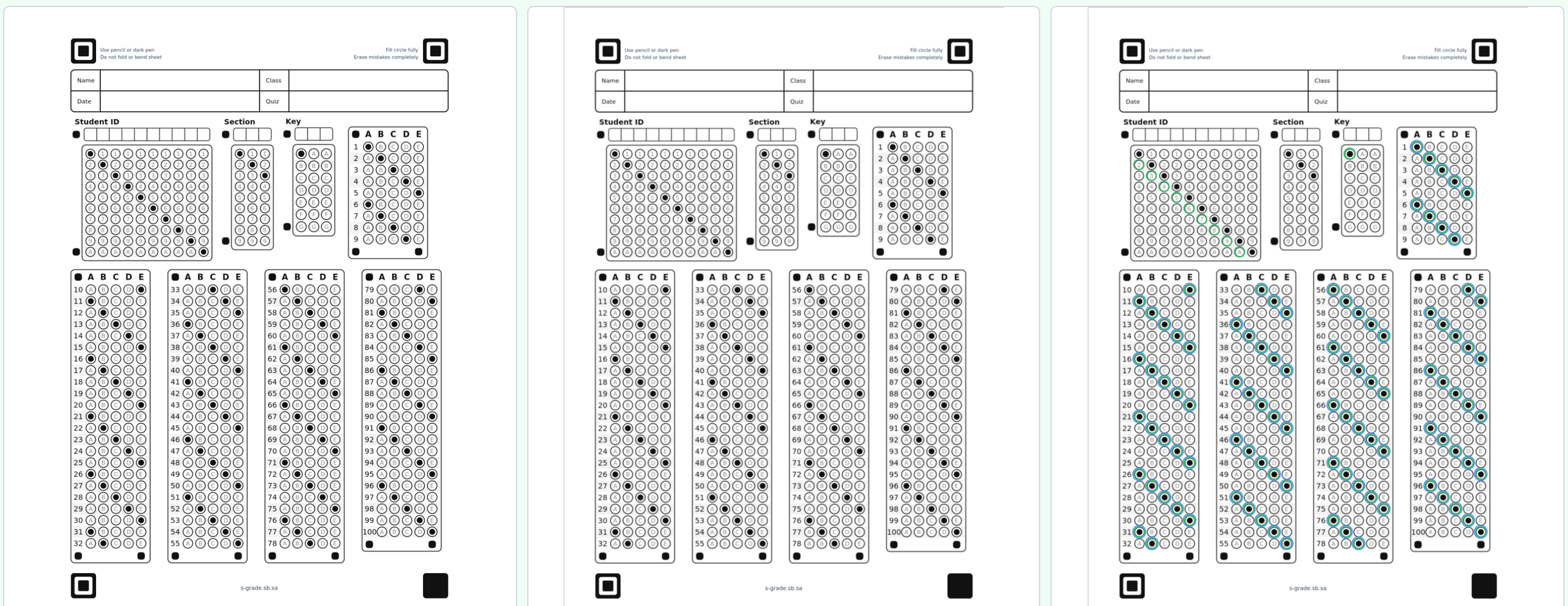
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`333111`	`333111`	✓
form	`A`	`A`	✓
section	`04`	`04`	✓
score	`60`	`60`	✓

result.json

100q · fully full (A-E, 3-col key A-G, 4 hdr) · pristine PASS

profile: `pristine` · 1302 passed · 0 failed



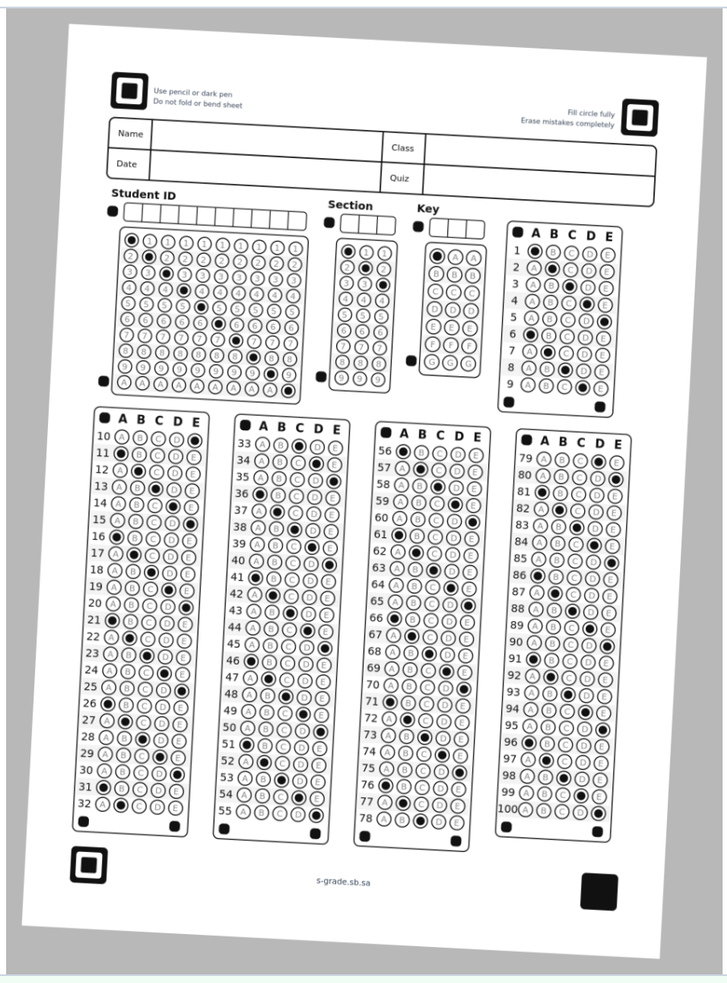
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`A`	`A`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

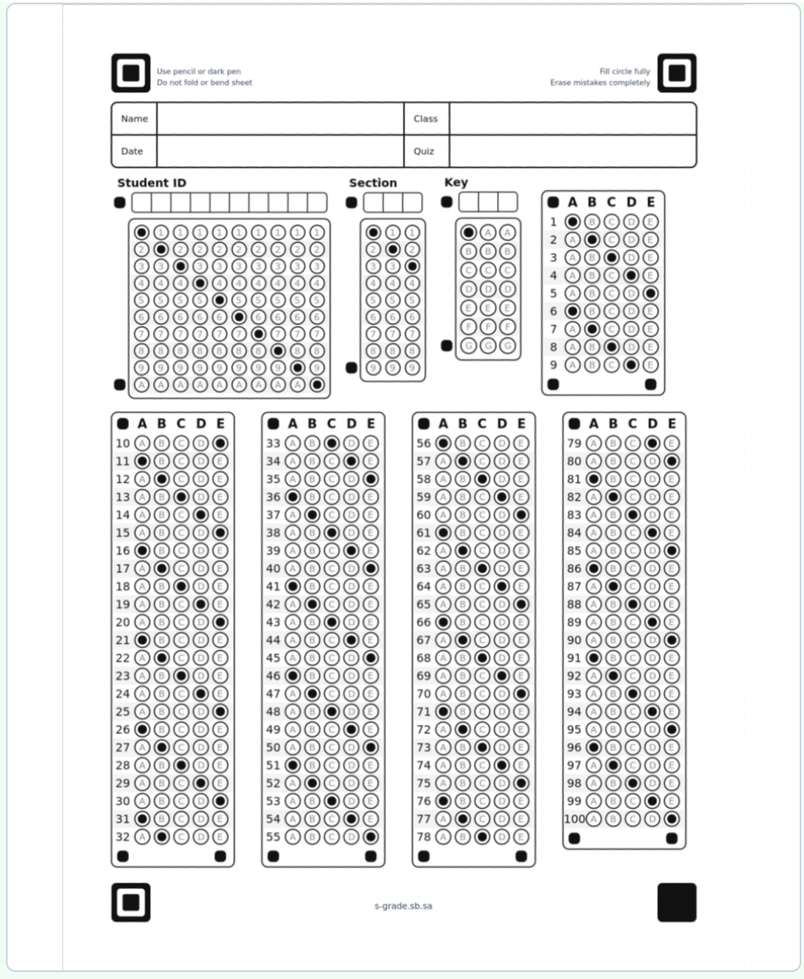
result.json

100q · fully full · rotation 3deg PASS

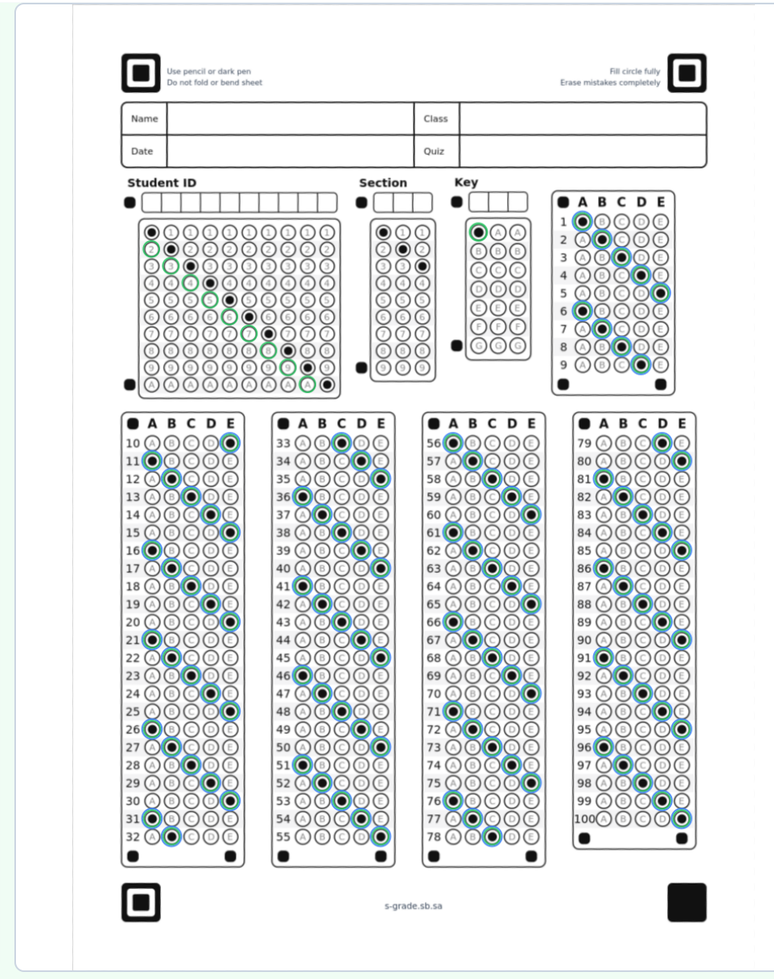
profile: `rotated_3deg` · 1302 passed · 0 failed



INPUT



WARPED



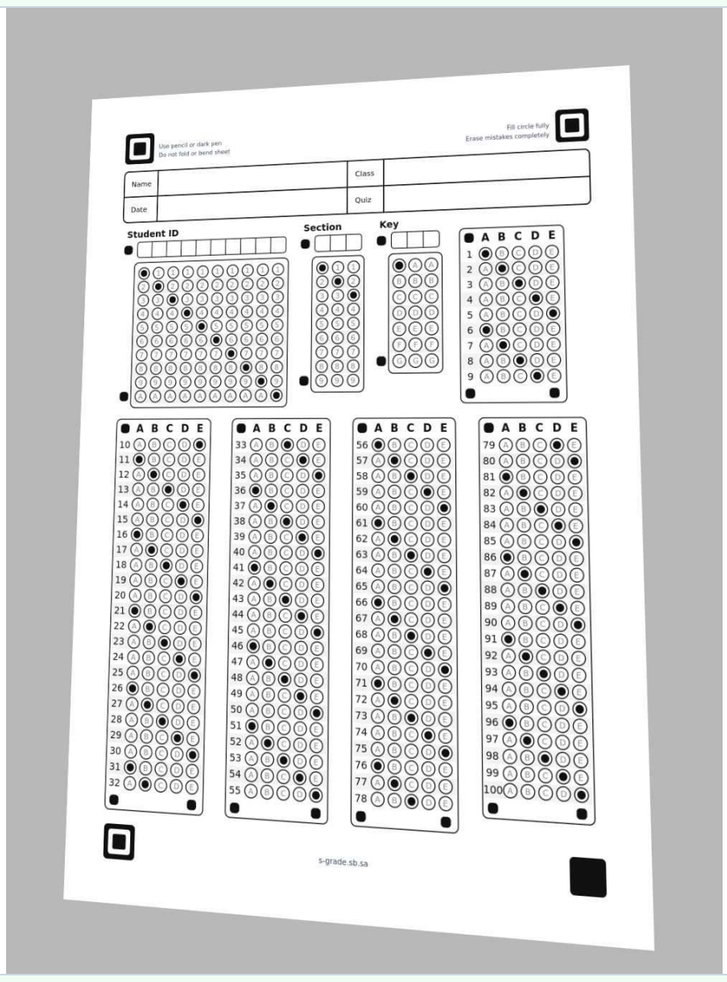
OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`A`	`A`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

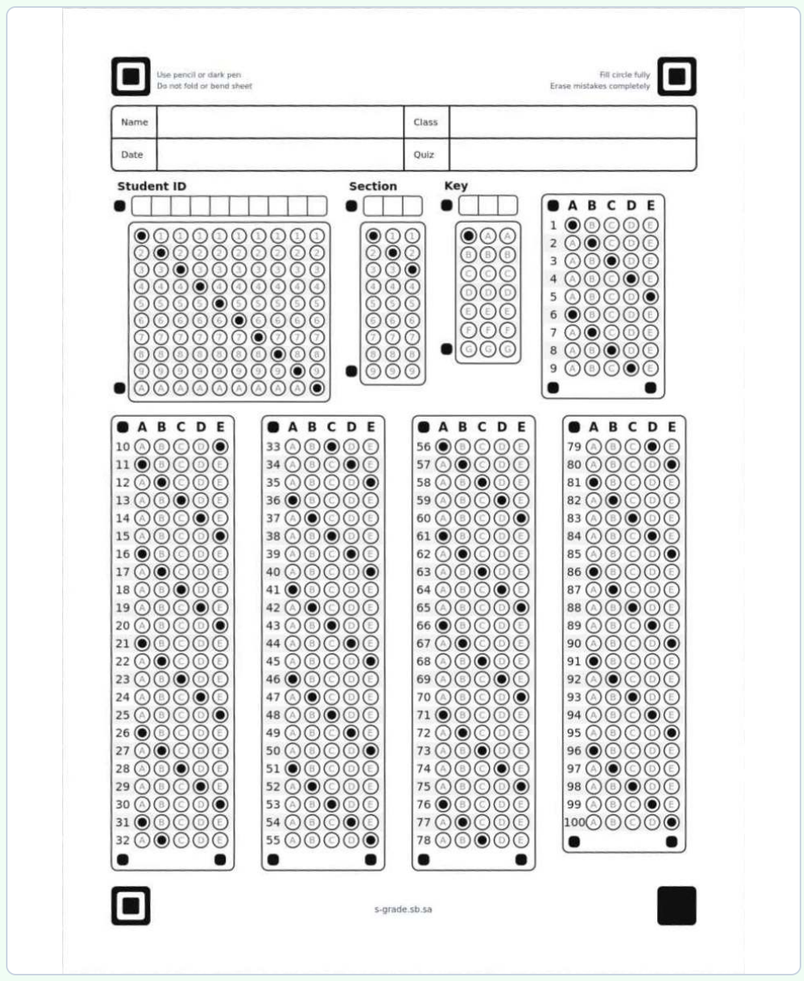
result.json

100q · fully full · perspective mild + jpeg q50 PASS

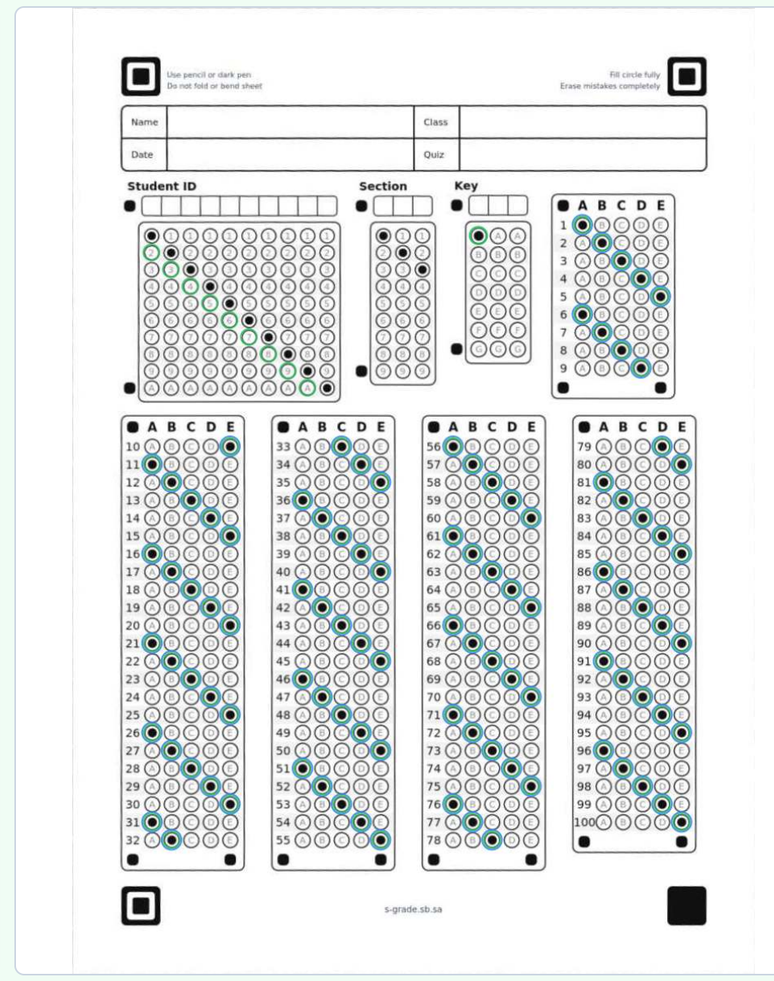
profile: `perspective_mild → jpeg_q50` · 1302 passed · 0 failed



INPUT



WARPED



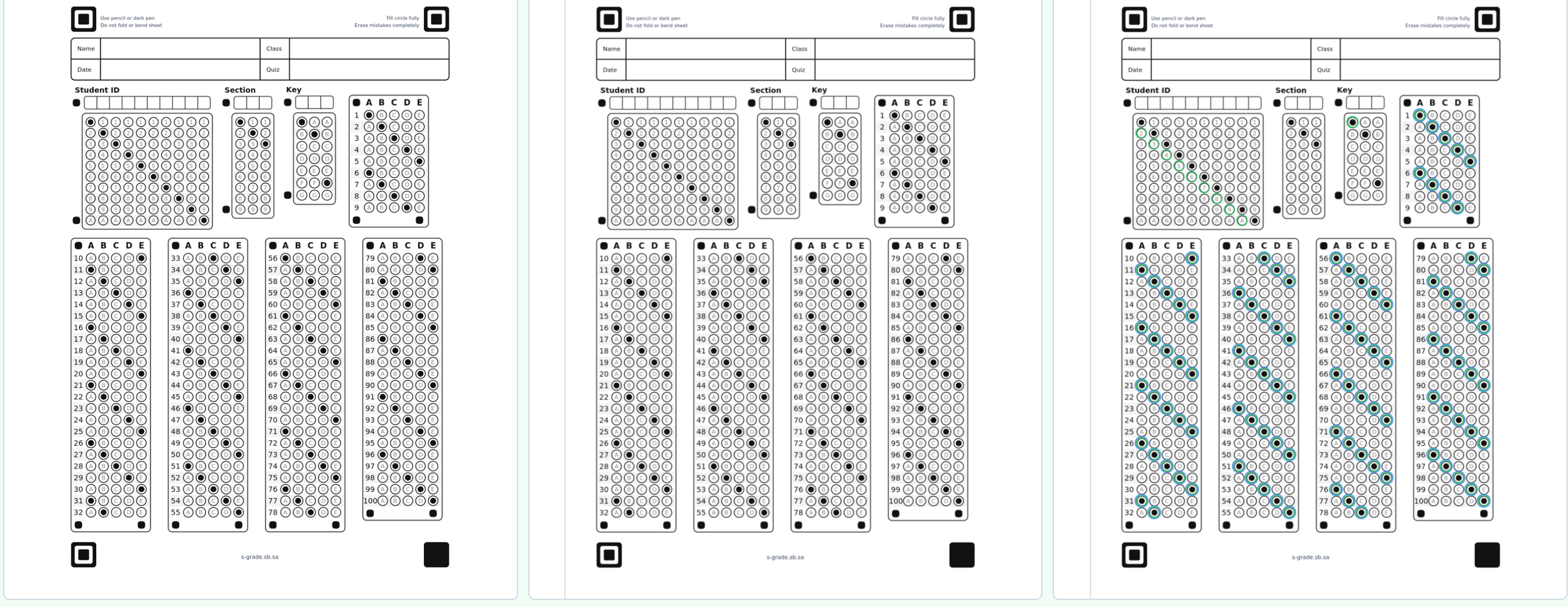
OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`A`	`A`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

result.json

100q · fully full · multi-char form "ABF" · pristine PASS

profile: `pristine` · 1302 passed · 0 failed



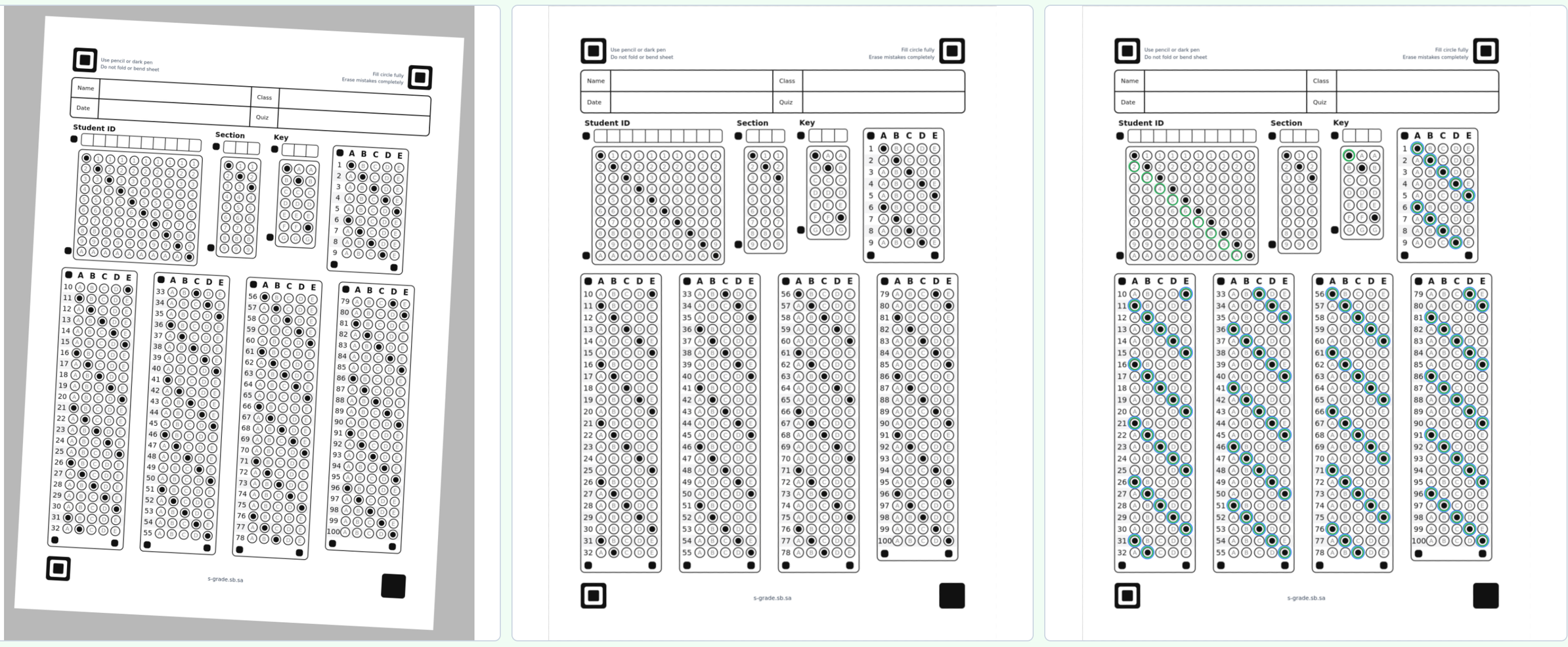
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`ABF`	`ABF`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

result.json

100q · fully full · multi-char form "ABF" · rotation 3deg PASS

profile: `rotated_3deg` · 1302 passed · 0 failed



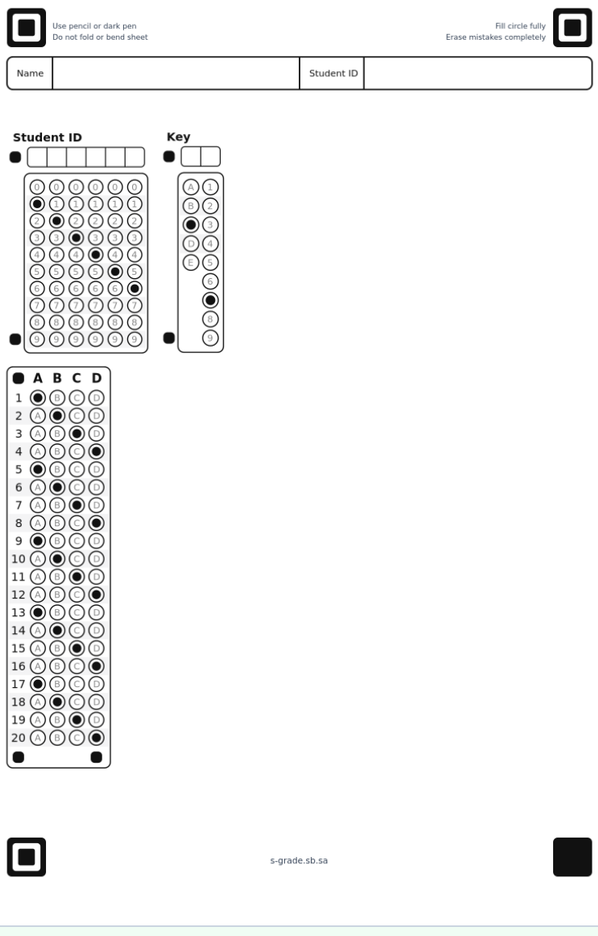
INPUT WARPED OVERLAY

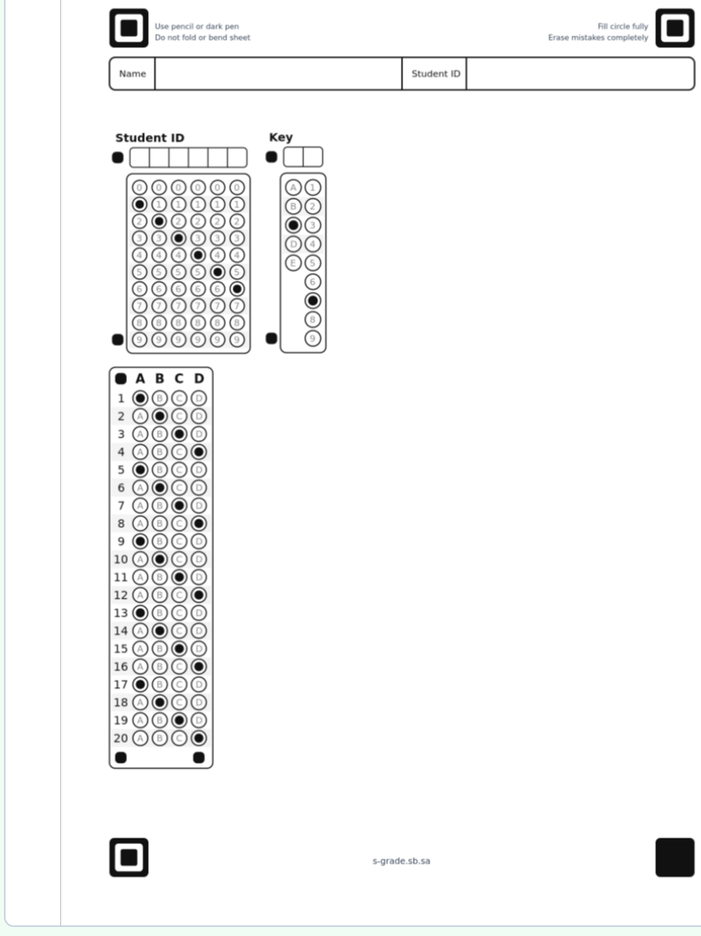
field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`ABF`	`ABF`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

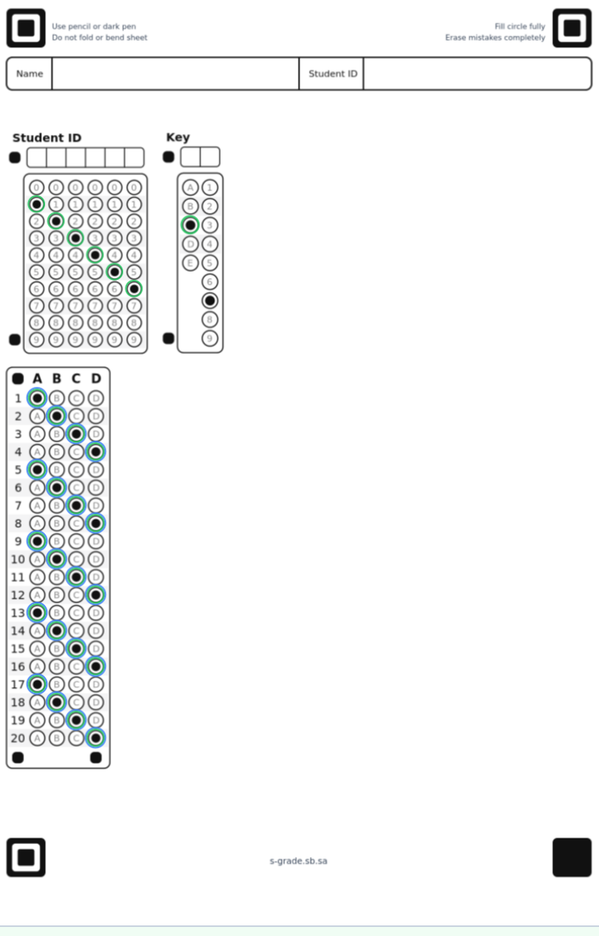
result.json

20q · per-column form scheme · form "C7" of 40 · pristine PASS

profile: `pristine` · 313 passed · 0 failed







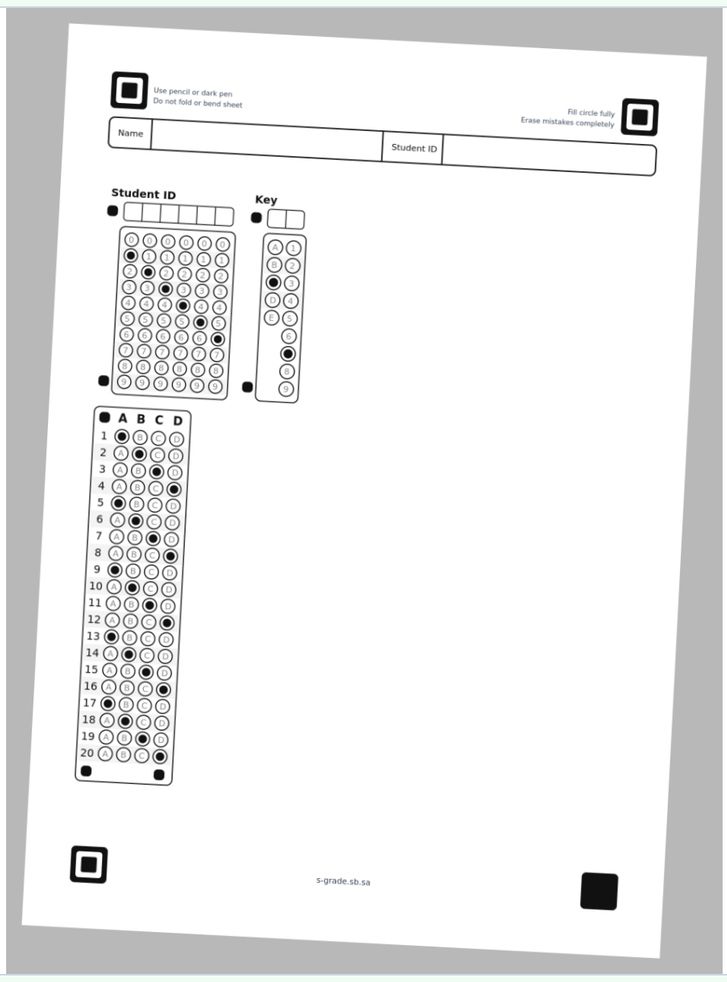
INPUT WARPED OVERLAY

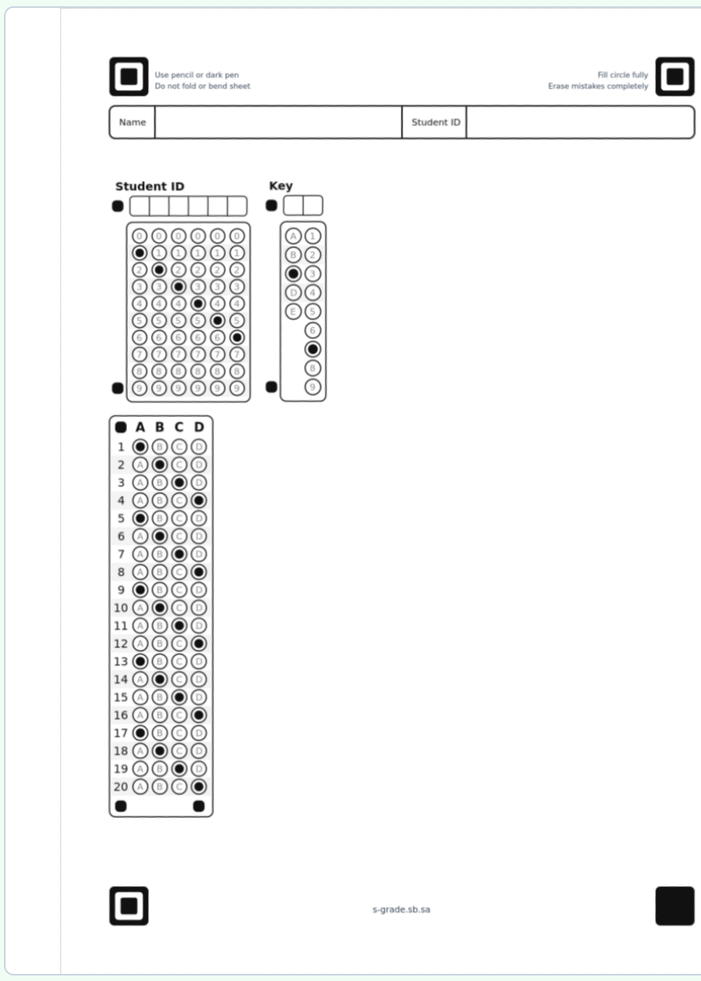
field	expected	actual	
studentId	`123456`	`123456`	✓
form	`C7`	`C7`	✓
score	`20`	`20`	✓

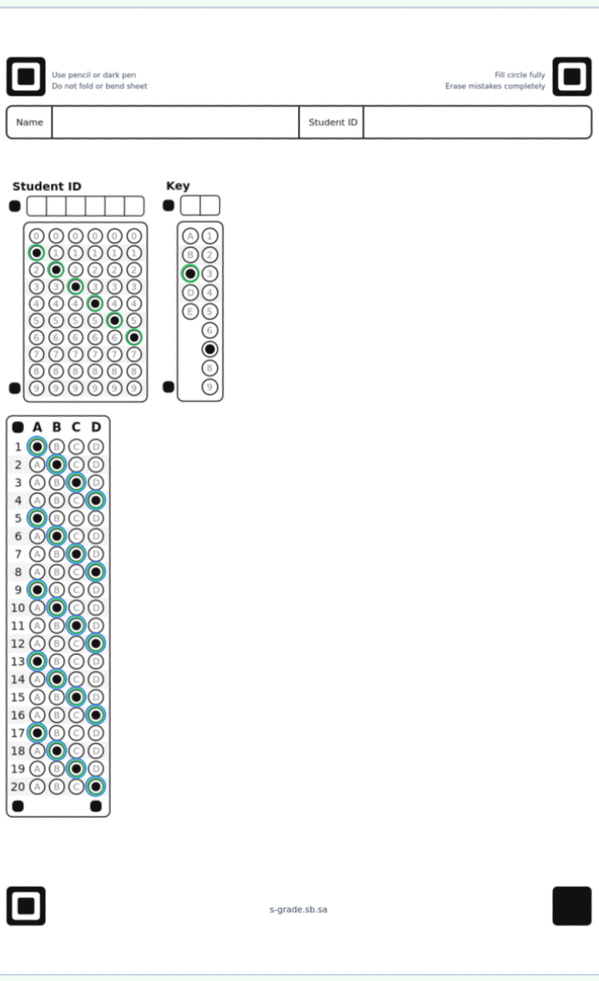
result.json

20q · per-column form scheme · form "C7" of 40 · rotation 3deg PASS

profile: `rotated_3deg` · 313 passed · 0 failed







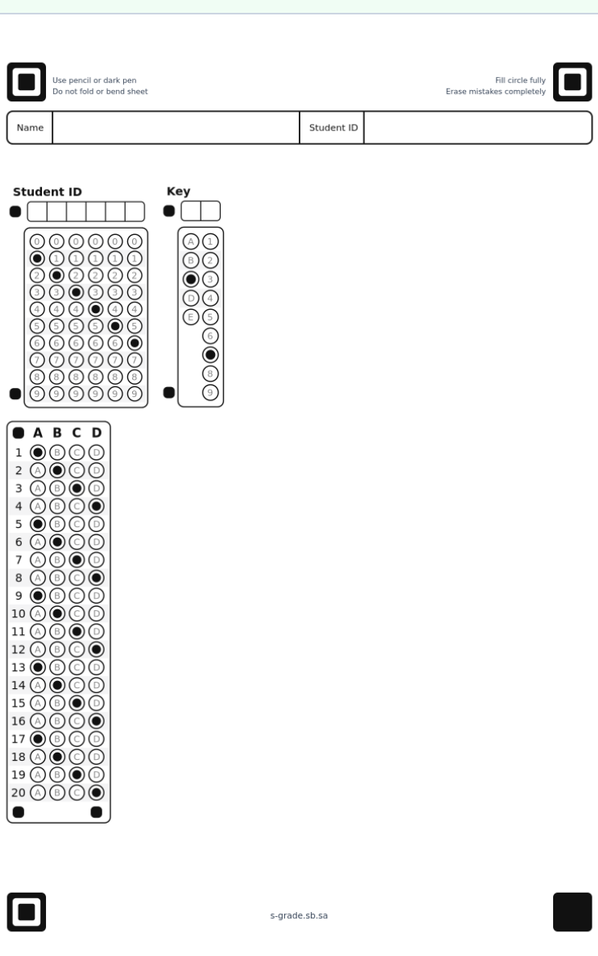
INPUT WARPED OVERLAY

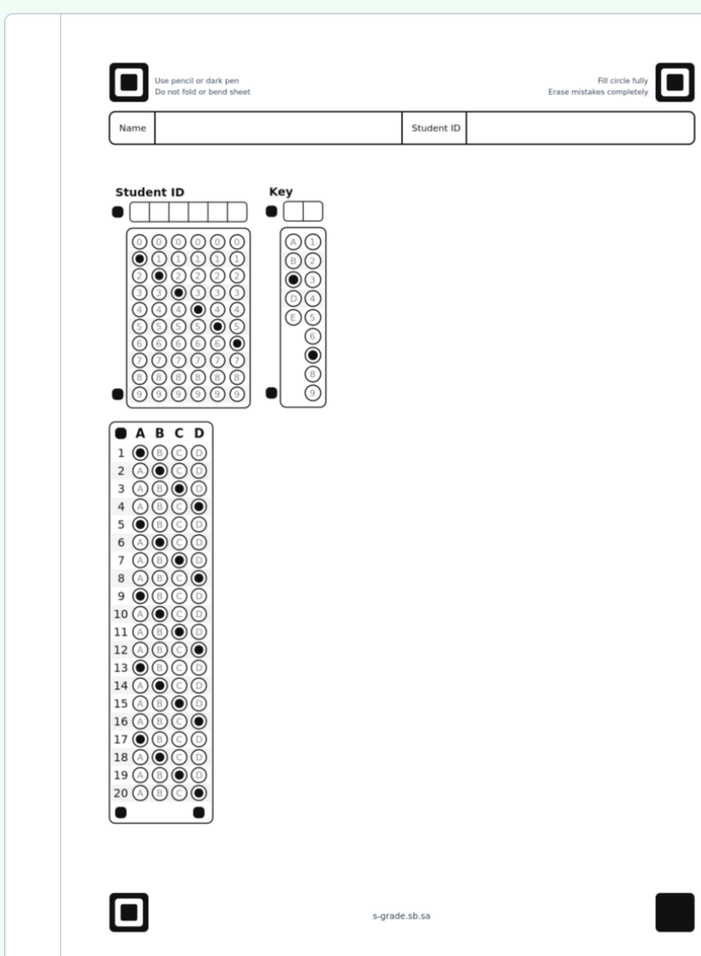
field	expected	actual	
studentId	`123456`	`123456`	✓
form	`C7`	`C7`	✓
score	`20`	`20`	✓

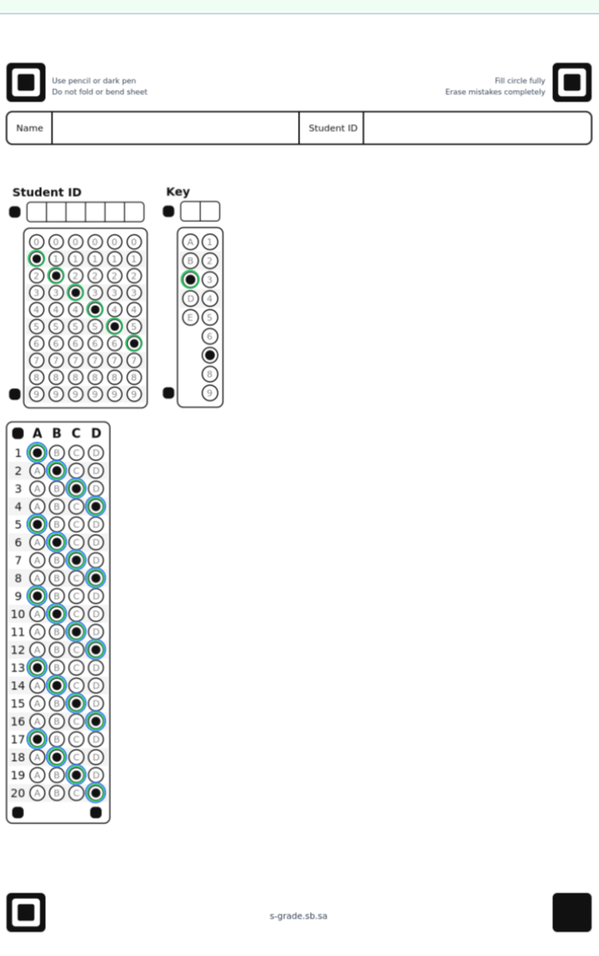
result.json

20q · per-column form scheme · one-per-column is not multi-fill PASS

profile: `pristine` · 314 passed · 0 failed







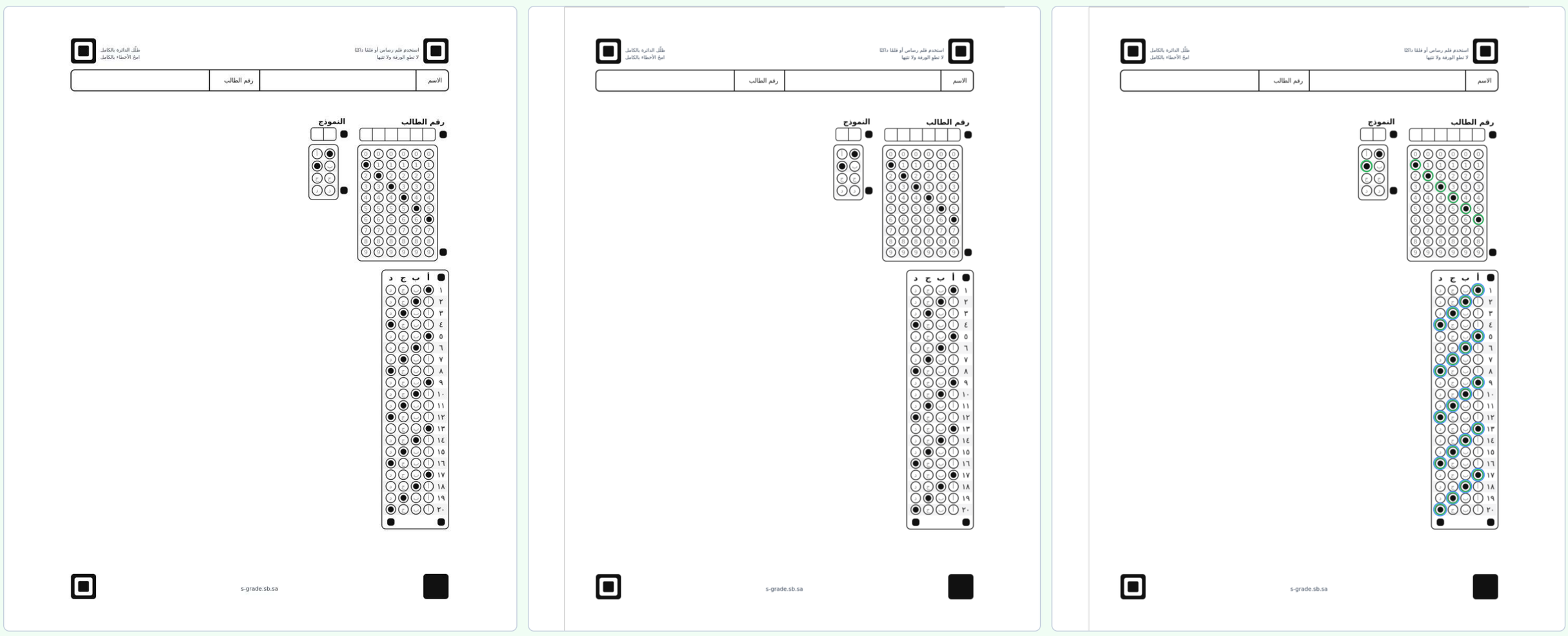
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`C7`	`C7`	✓
score	`20`	`20`	✓

result.json

20q · Arabic-printed 2-col key · canonical form "BA" · pristine PASS

profile: `pristine` · 301 passed · 0 failed



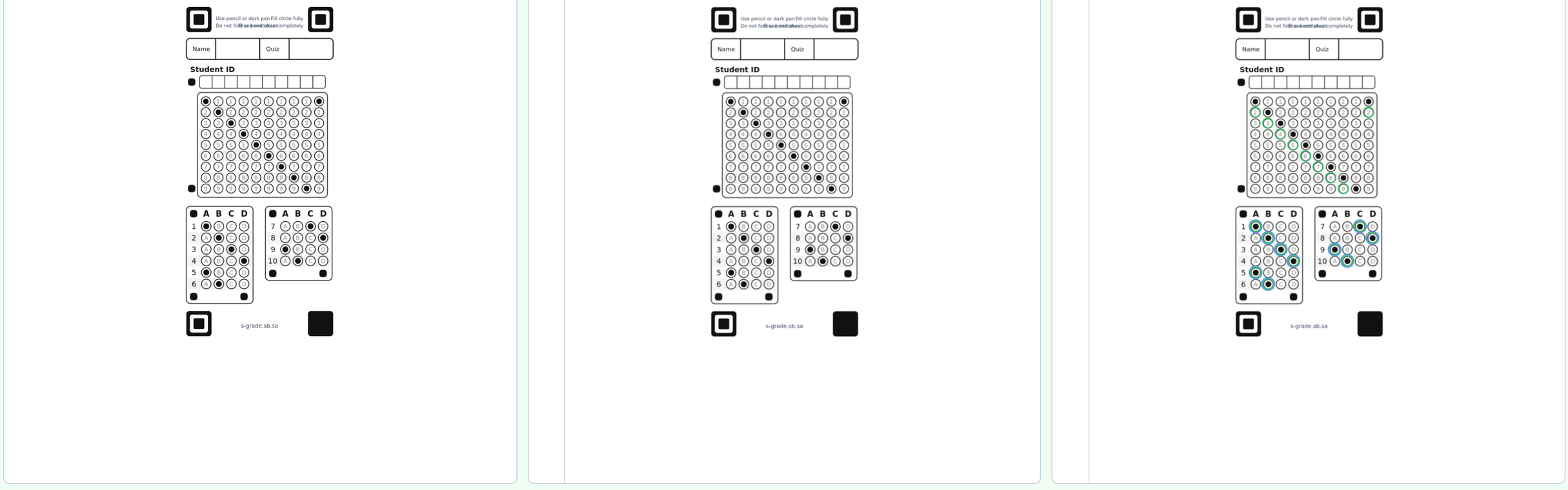
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`BA`	`BA`	✓
score	`20`	`20`	✓

result.json

10q · smaaaall (margin 70, no section/key) · pristine PASS

profile: `pristine` · 265 passed · 0 failed



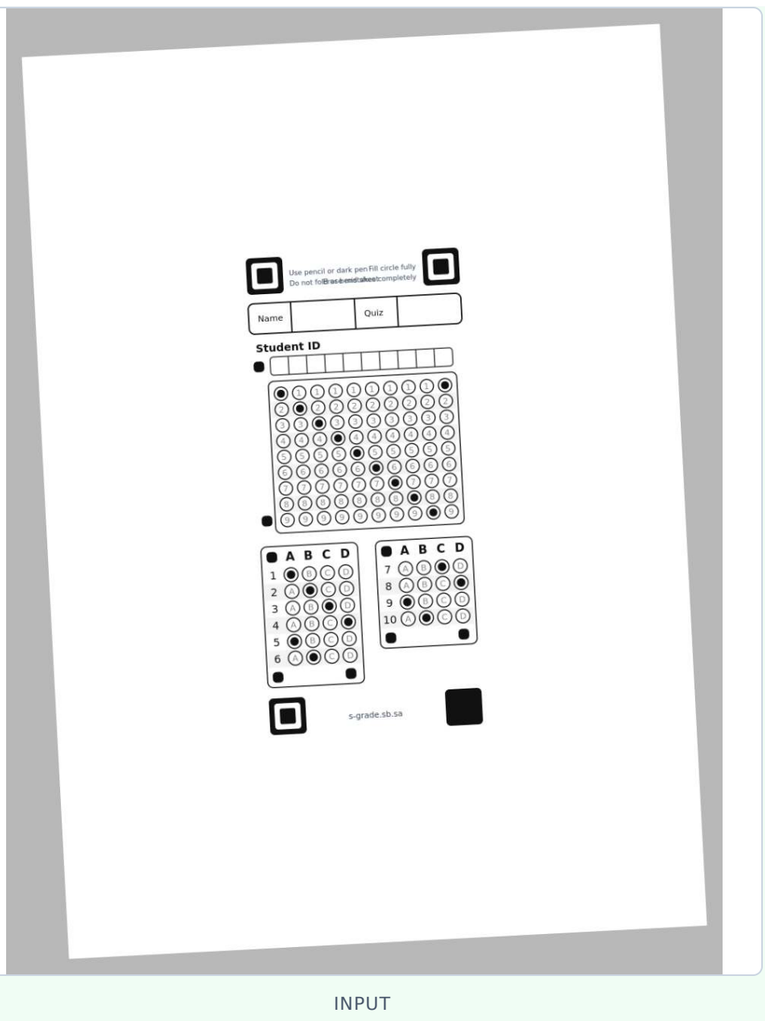
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
score	`10`	`10`	✓

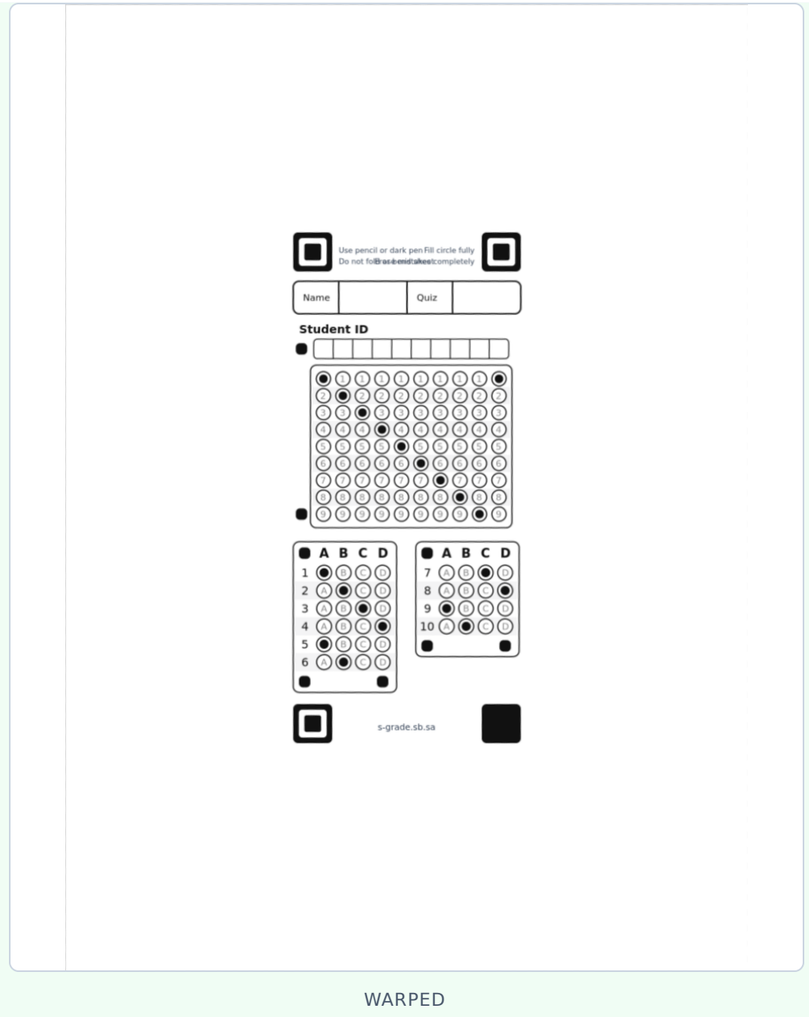
result.json

10q · smaaaall · rotation -3deg PASS

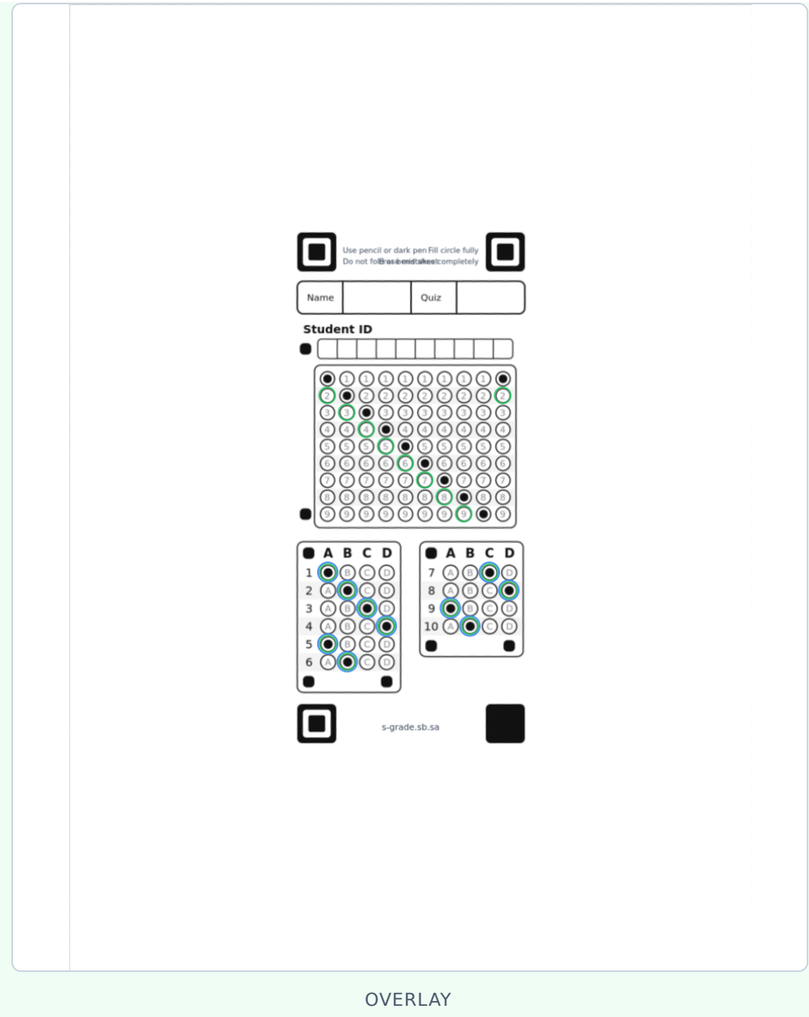
profile: `rotated_neg3deg` · 265 passed · 0 failed



INPUT



WARPED



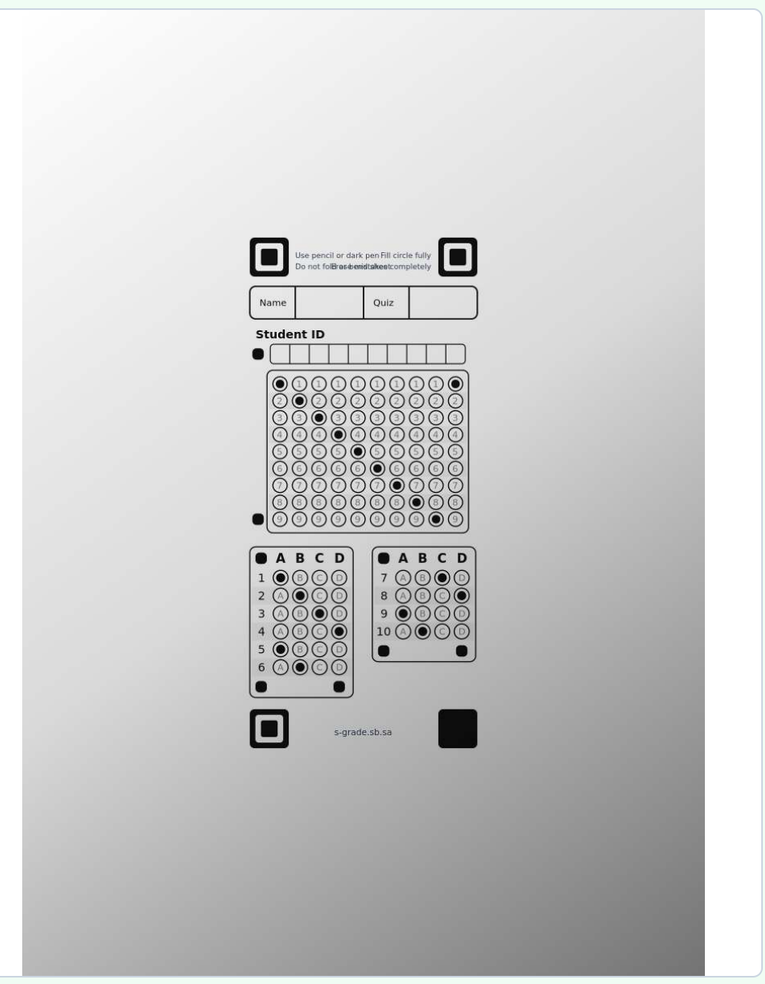
OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
score	`10`	`10`	✓

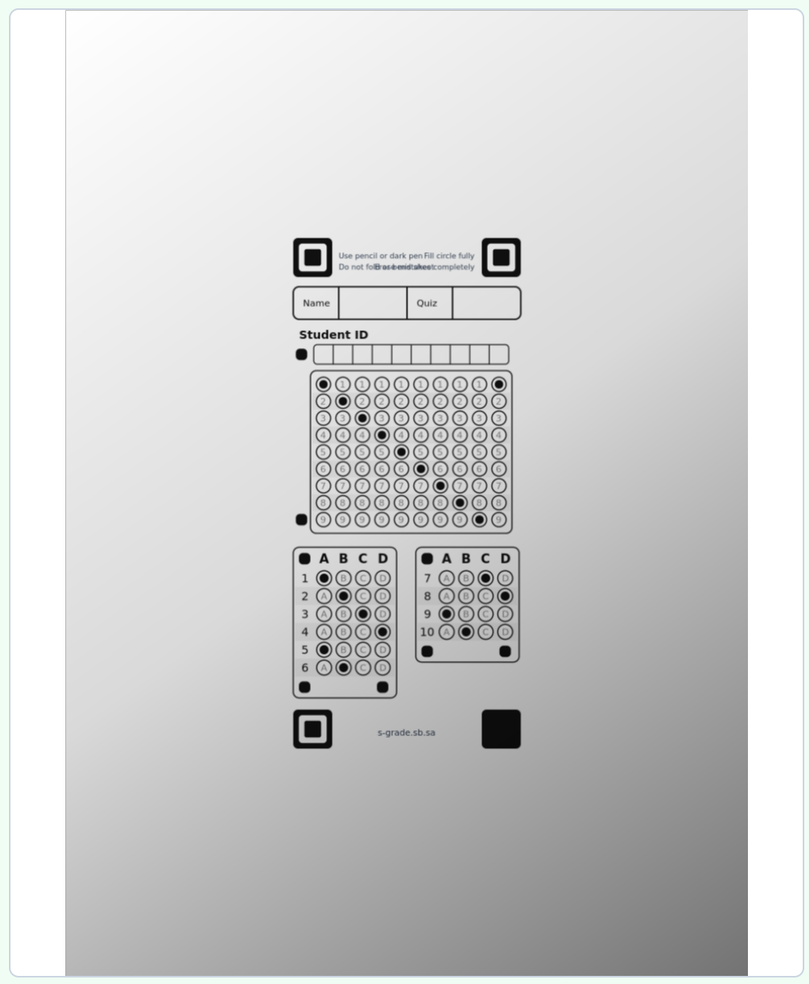
result.json

10q · smaaaall · lighting gradient PASS

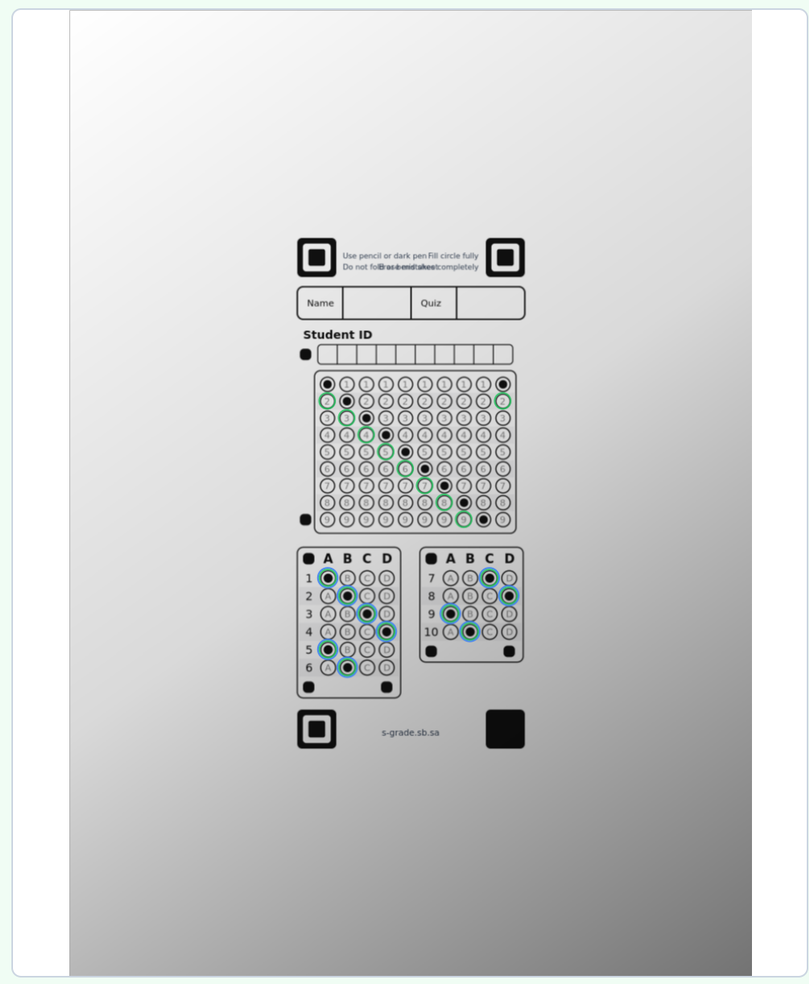
profile: `lighting_gradient` · 265 passed · 0 failed



INPUT



WARPED



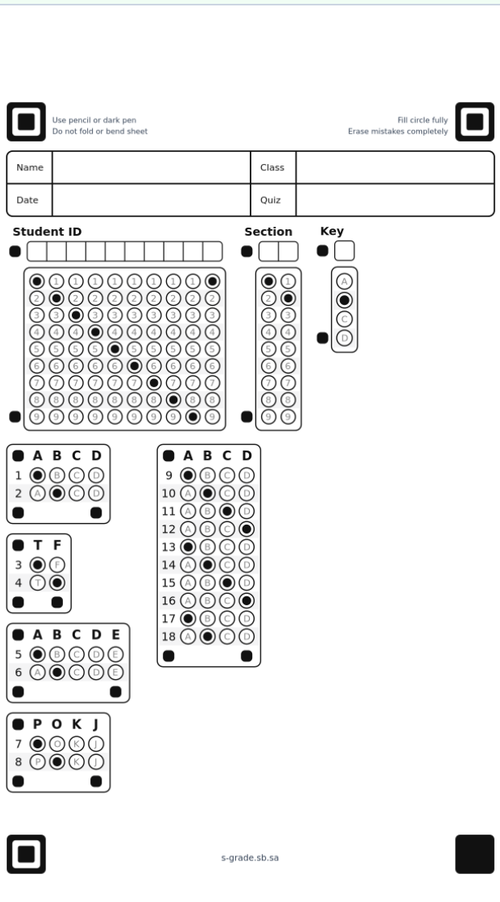
OVERLAY

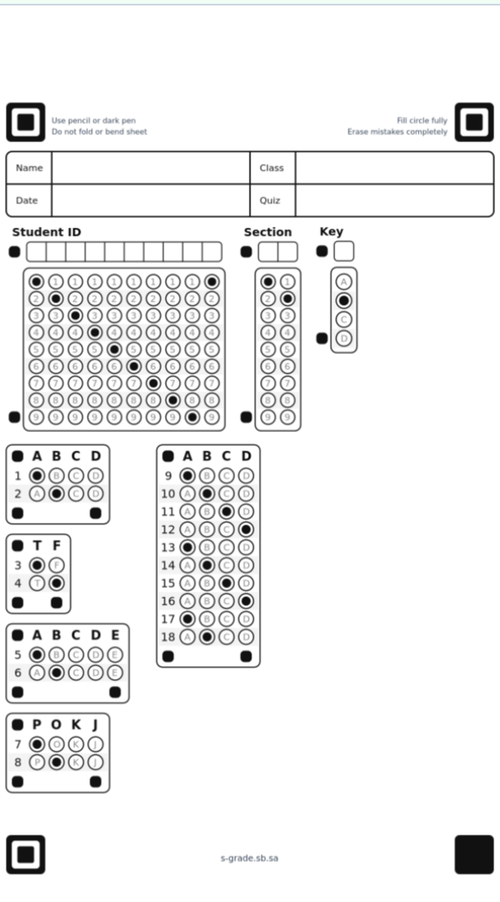
field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
score	`10`	`10`	✓

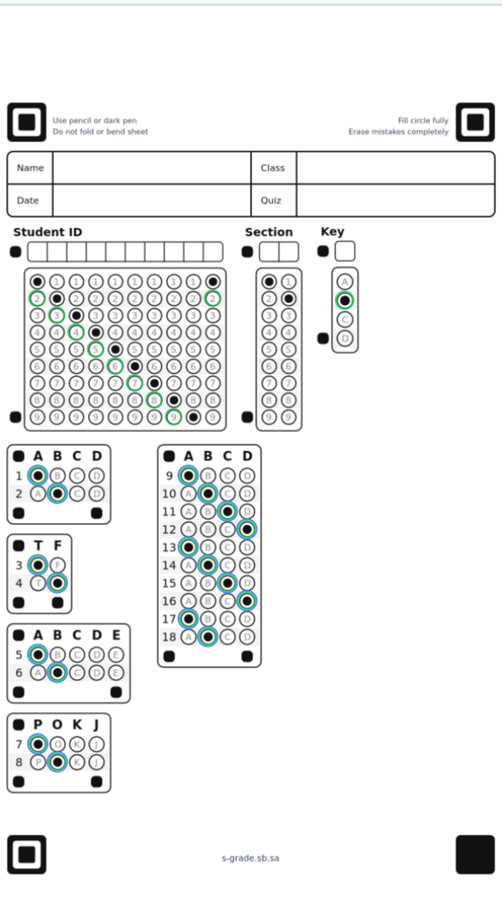
result.json

18q · alternating (A-D/T-F/A-E/POKJ/A-D) · pristine PASS

profile: `pristine` · 370 passed · 0 failed







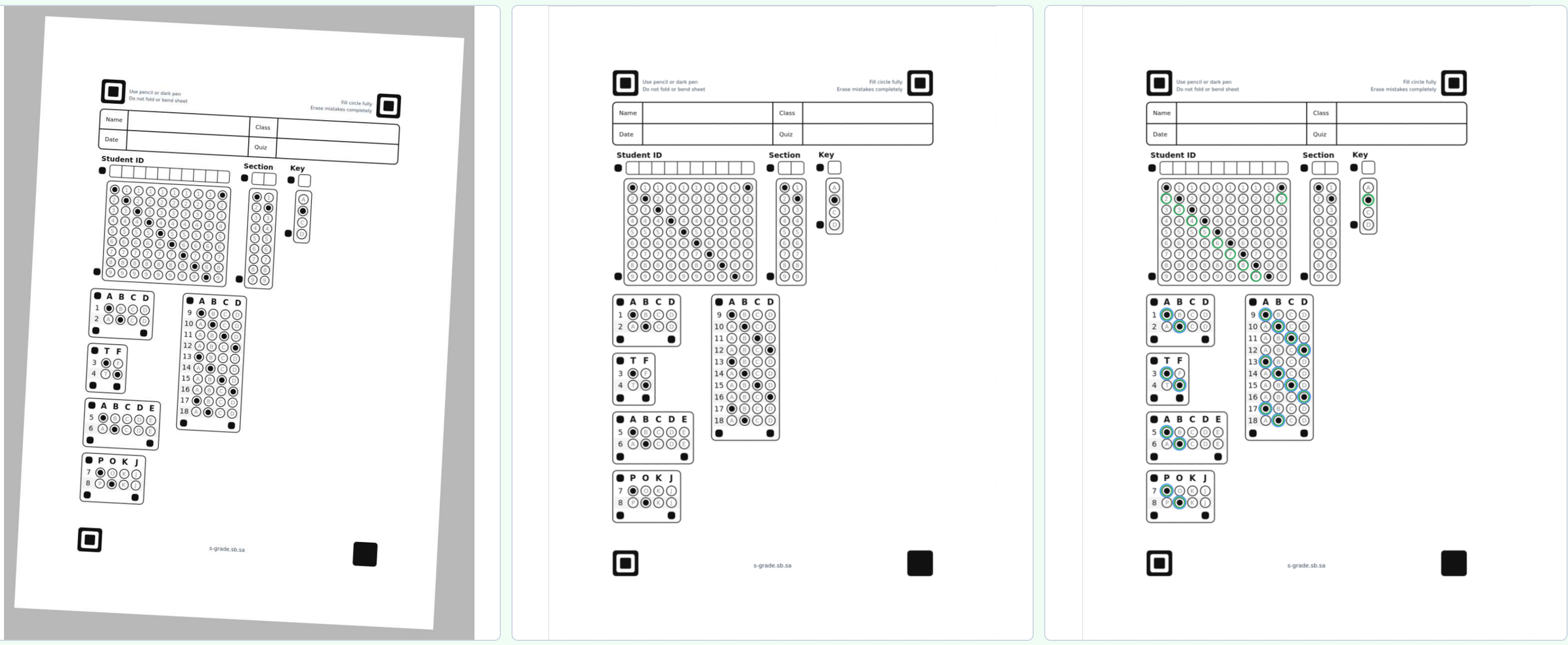
INPUT | WARPED | OVERLAY

field	expected	actual	
studentId	1234567891	1234567891	✓
form	B	B	✓
section	12	12	✓
score	18	18	✓

result.json

18q · alternating · rotation 3deg PASS

profile: `rotated_3deg` · 370 passed · 0 failed



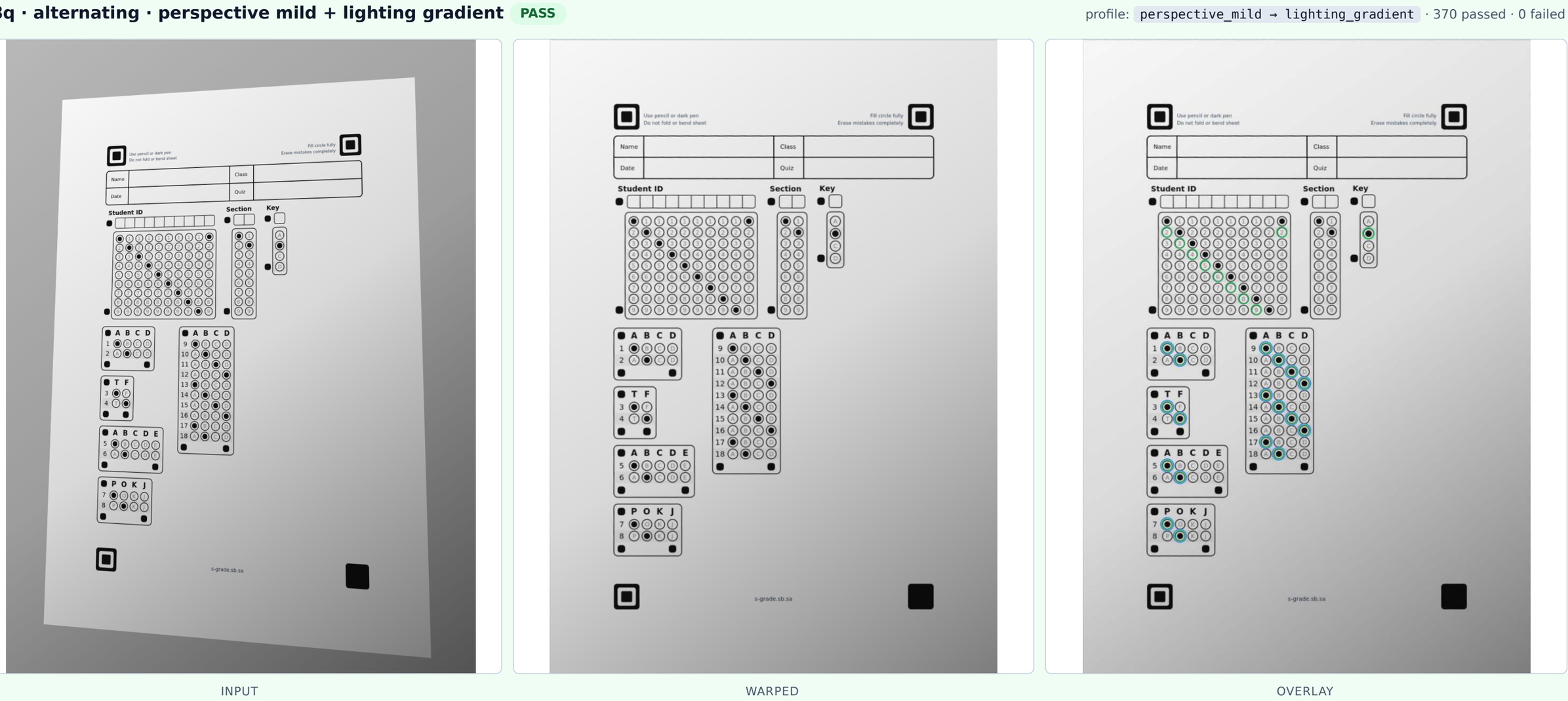
INPUT | WARPED | OVERLAY

field	expected	actual	
studentId	1234567891	1234567891	✓
form	B	B	✓
section	12	12	✓
score	18	18	✓

result.json

18q · alternating · perspective mild + lighting gradient PASS

profile: `perspective_mild → lighting_gradient` · 370 passed · 0 failed



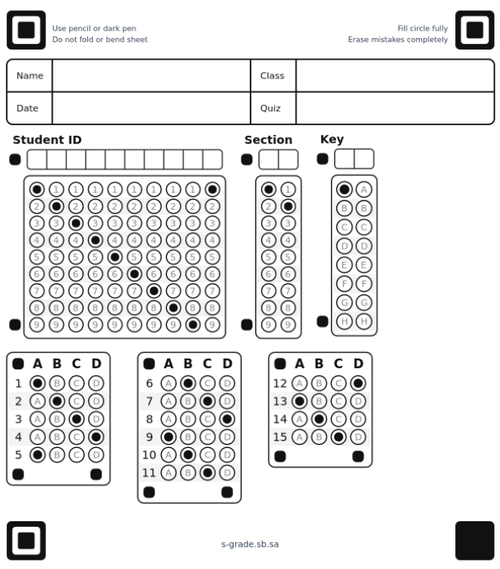
INPUT | WARPED | OVERLAY

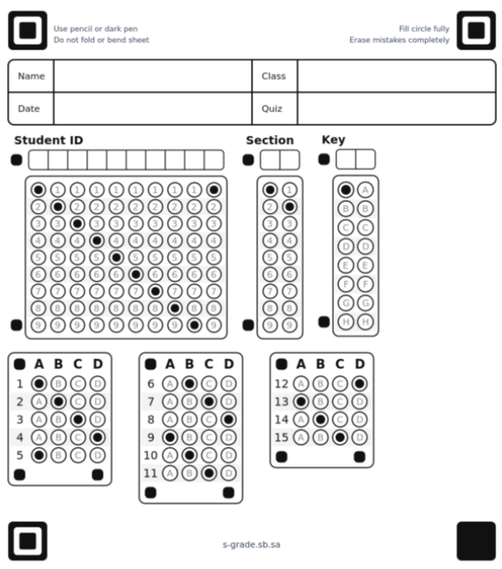
field	expected	actual	
studentId	1234567891	1234567891	✓
form	B	B	✓
section	12	12	✓
score	18	18	✓

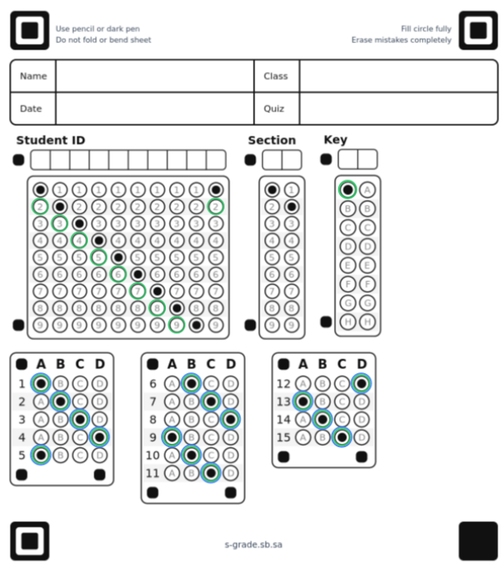
result.json

15q · short quiz (margin 30/64, 2-col A-H key) · pristine PASS

profile: `pristine` · 374 passed · 0 failed







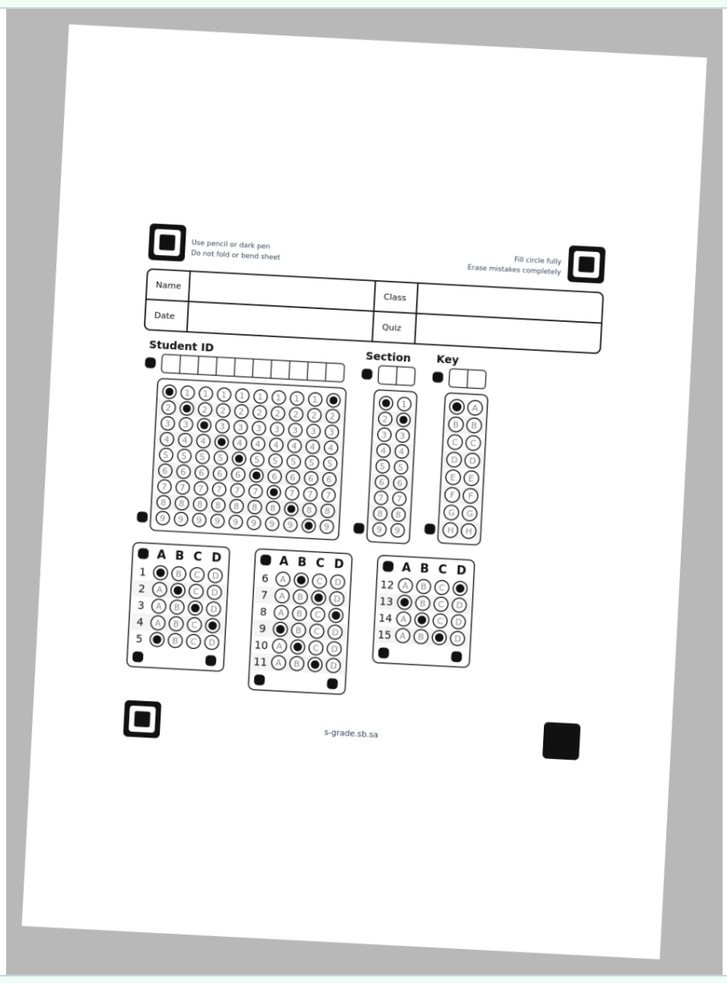
INPUT WARPED OVERLAY

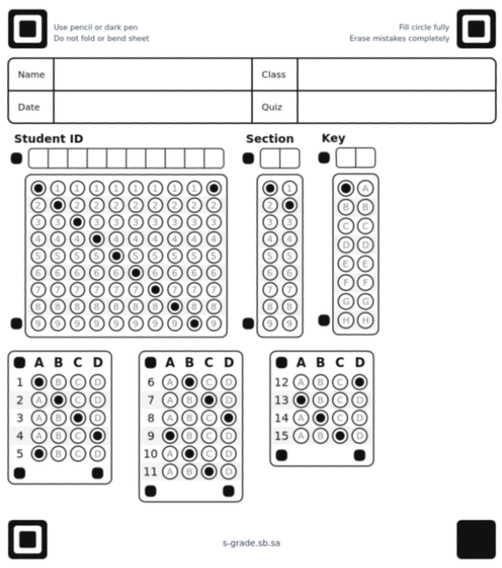
field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

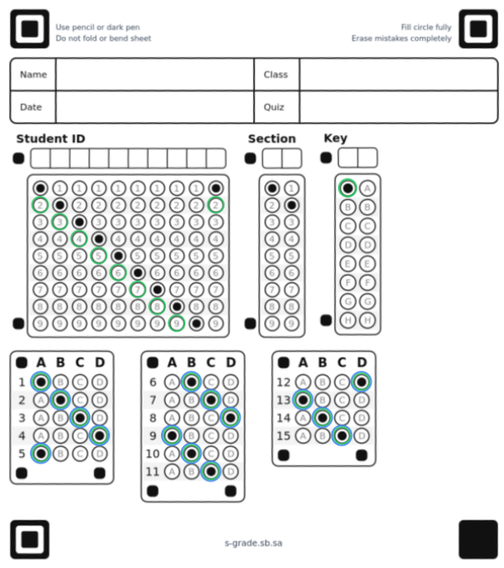
result.json

15q · short quiz · rotation 3deg PASS

profile: `rotated_3deg` · 374 passed · 0 failed







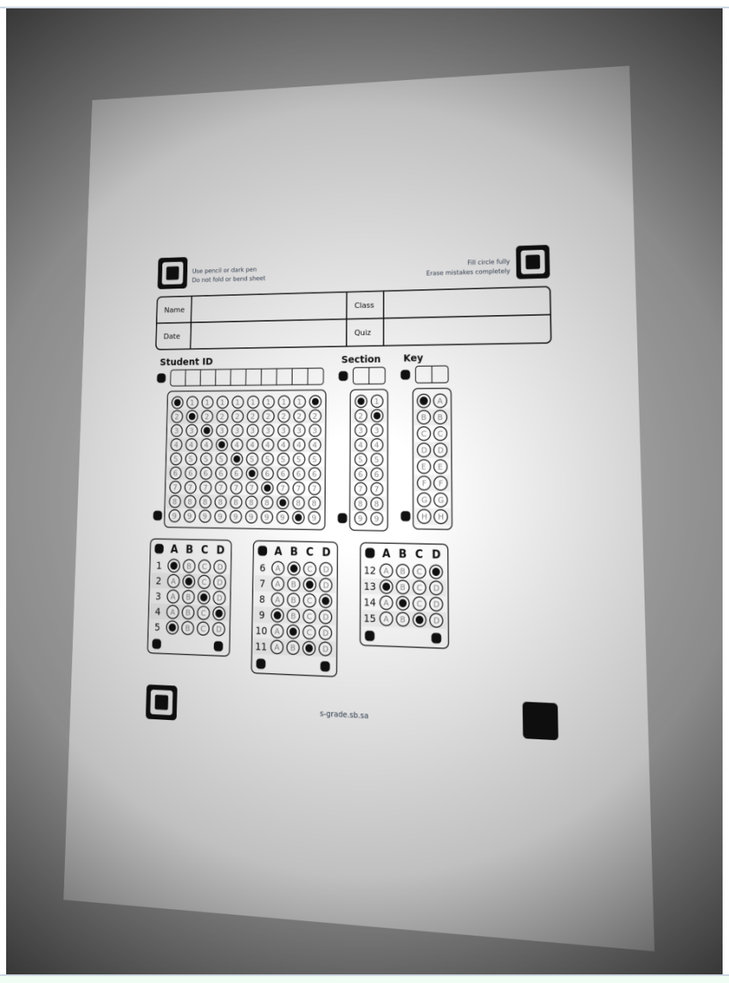
INPUT WARPED OVERLAY

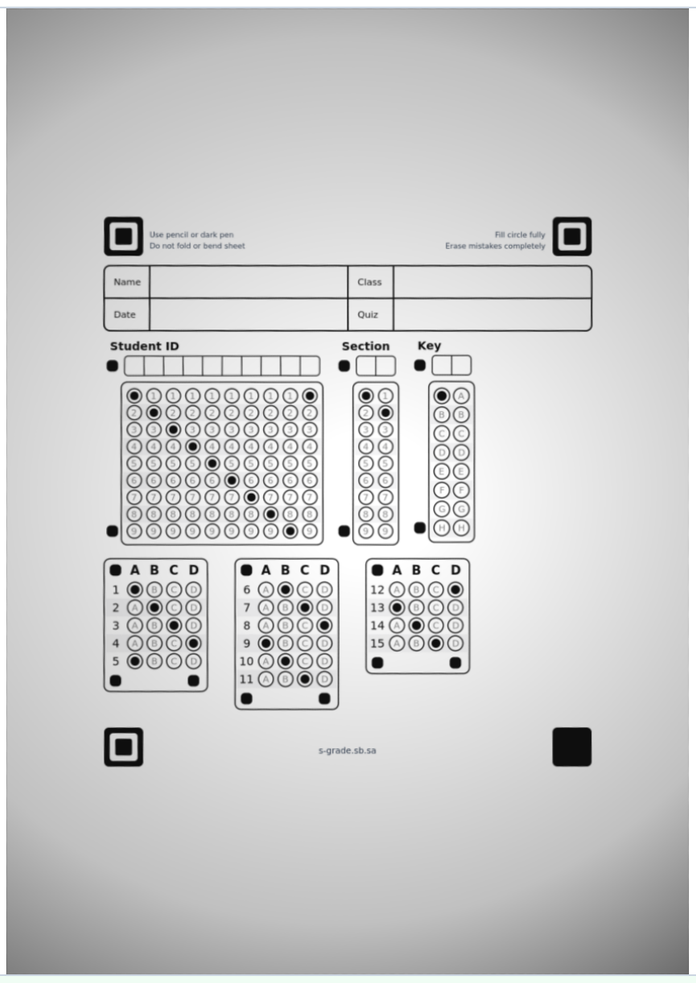
field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

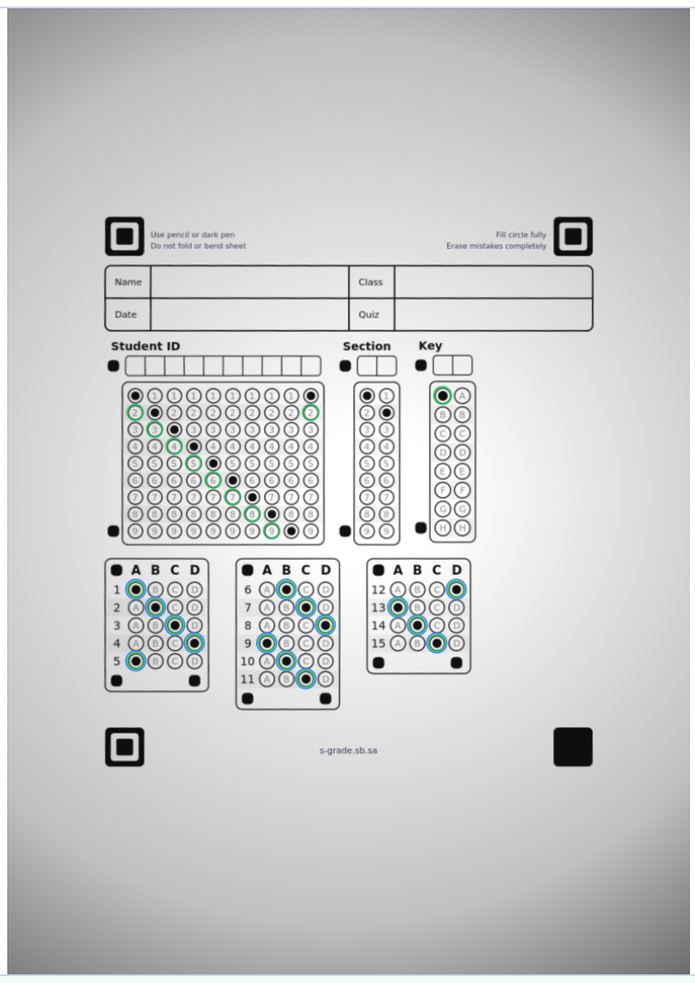
result.json

15q · short quiz · perspective mild + lighting vignette PASS

profile: `perspective_mild → lighting_vignette` · 374 passed · 0 failed







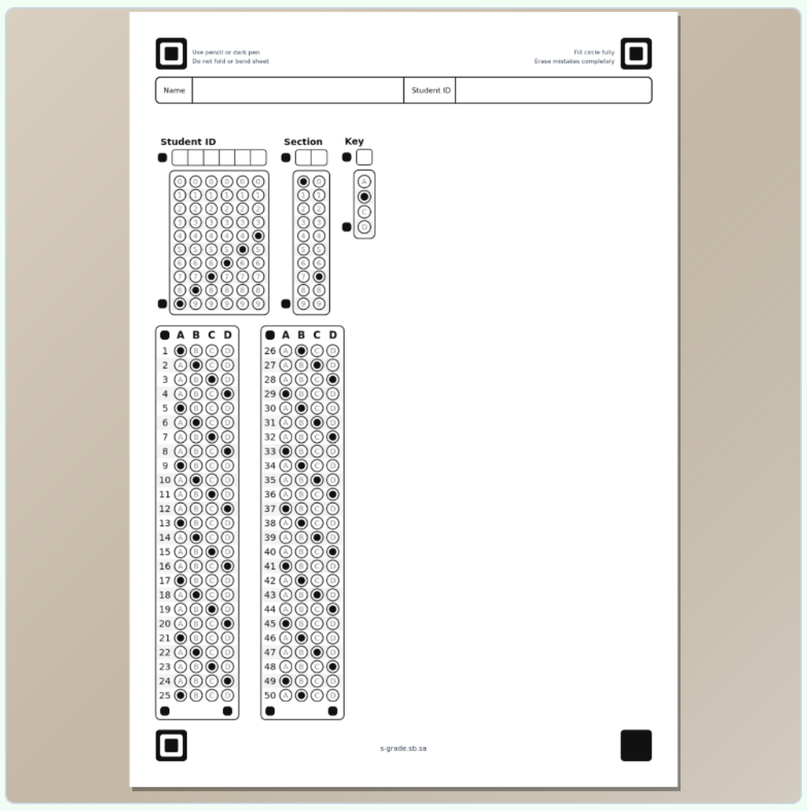
INPUT WARPED OVERLAY

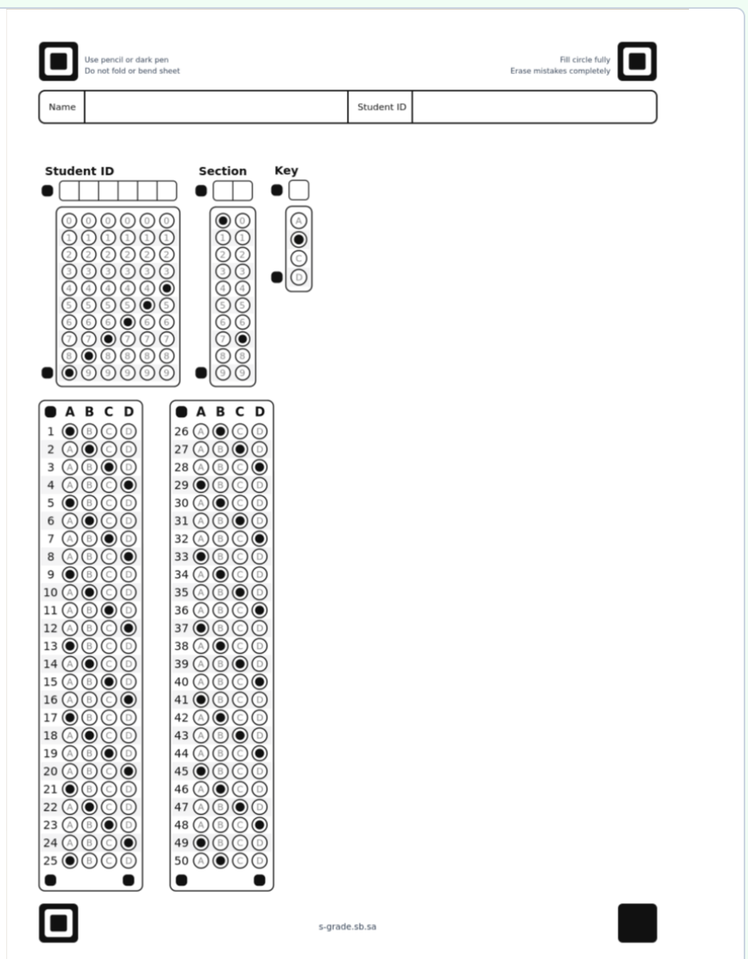
field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

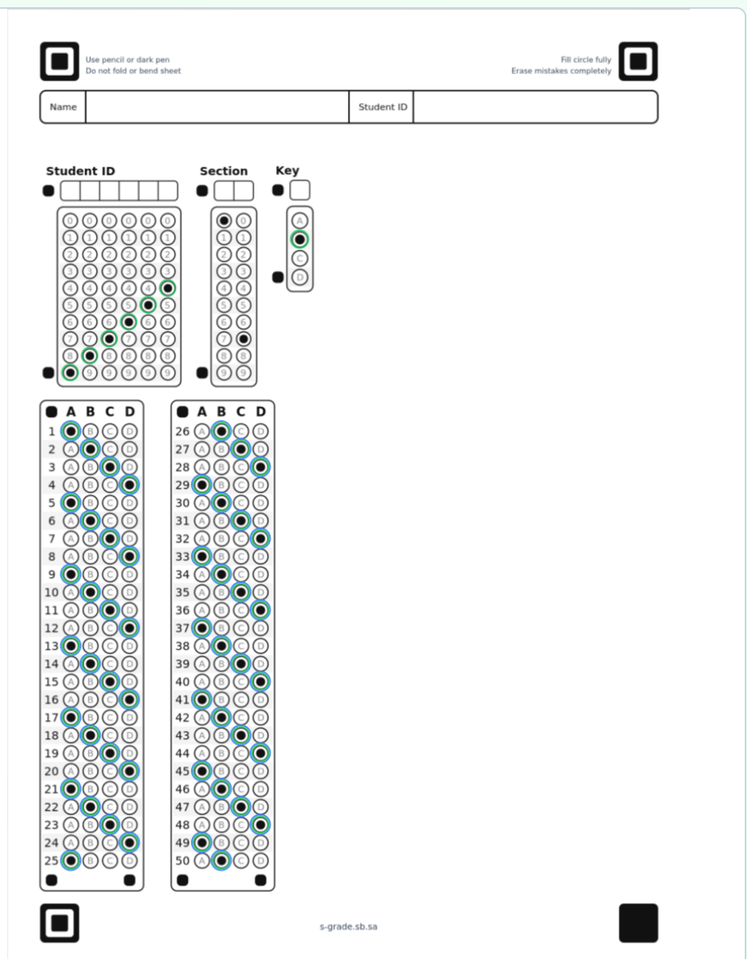
result.json

50q · crop square (1:1) — sheet fills short axis PASS

profile: `crop_square_tight` · 574 passed · 0 failed







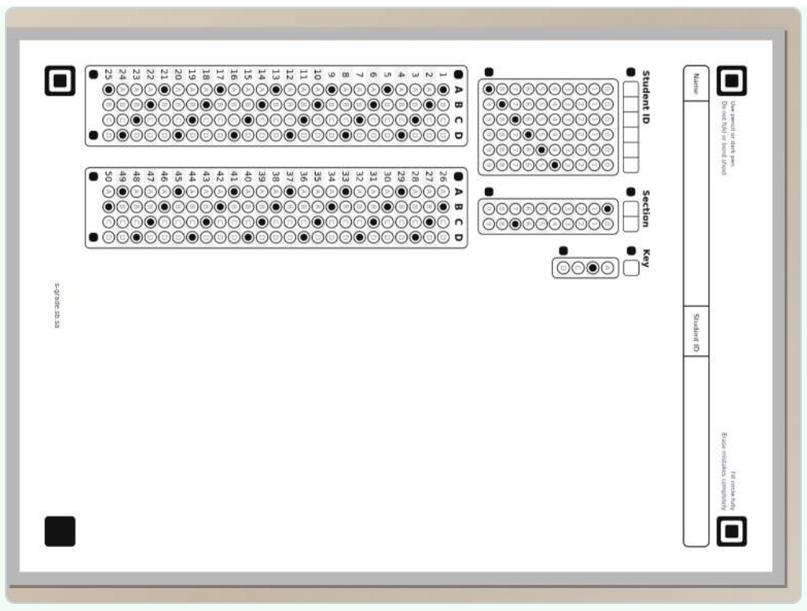
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

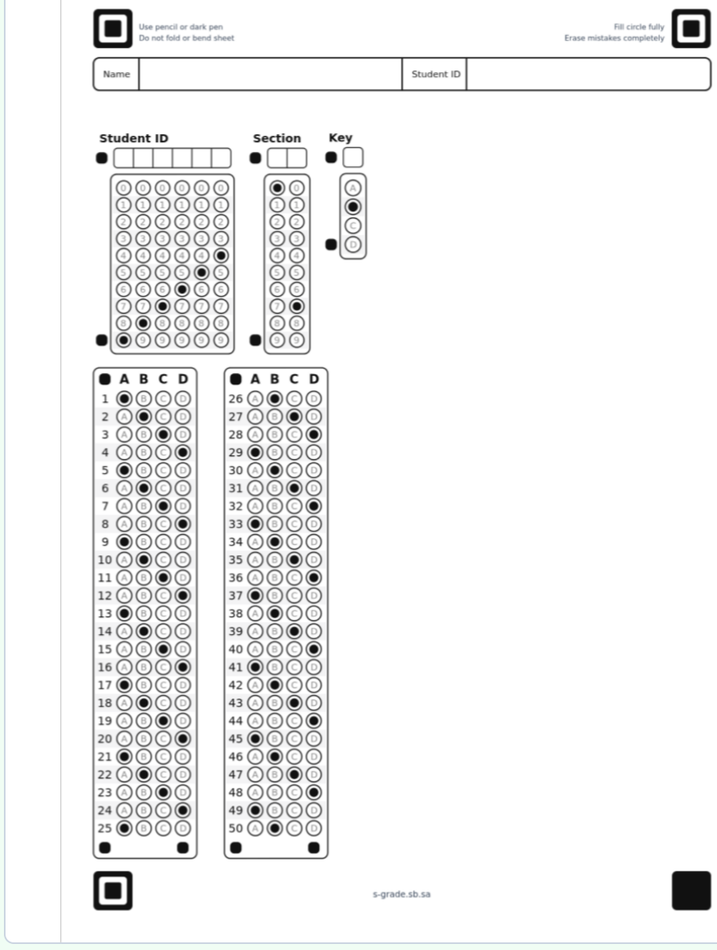
result.json

50q · crop landscape 4:3 — sheet rotated 90° PASS

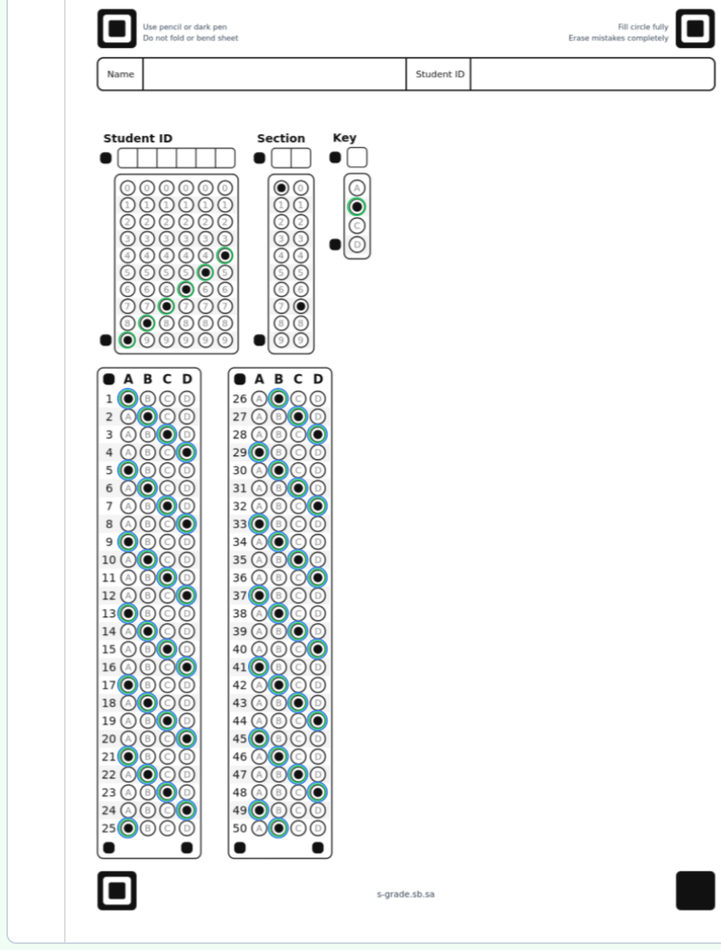
profile: `crop_4_3_landscape_tight` · 574 passed · 0 failed



INPUT



WARPED



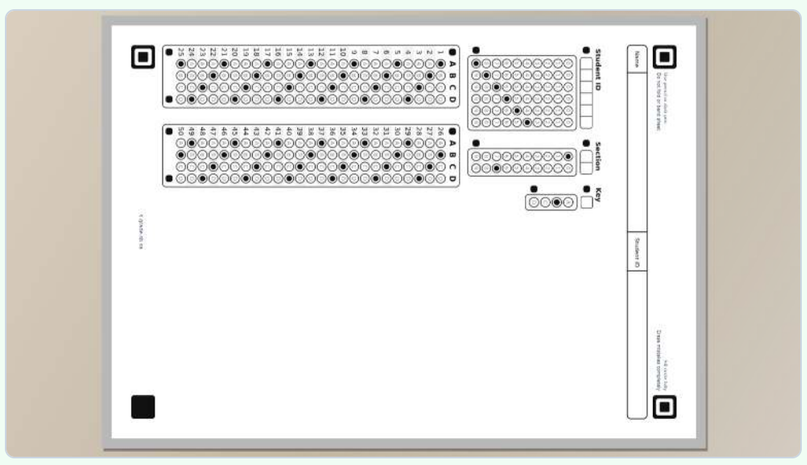
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

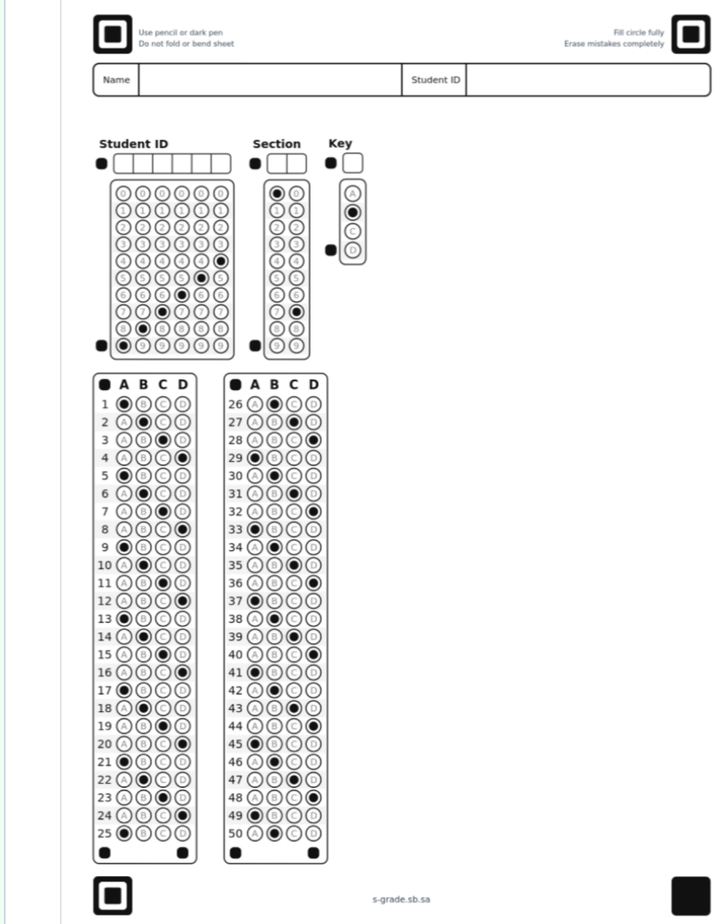
result.json

50q · crop landscape 16:9 — sheet rotated 90° PASS

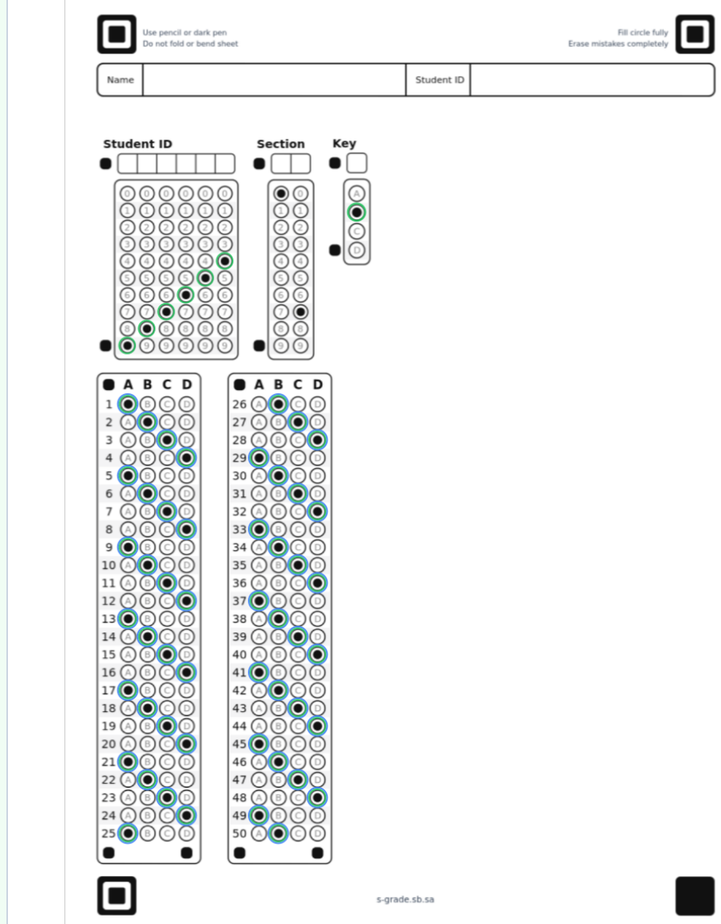
profile: `crop_16_9_landscape_tight` · 574 passed · 0 failed



INPUT



WARPED



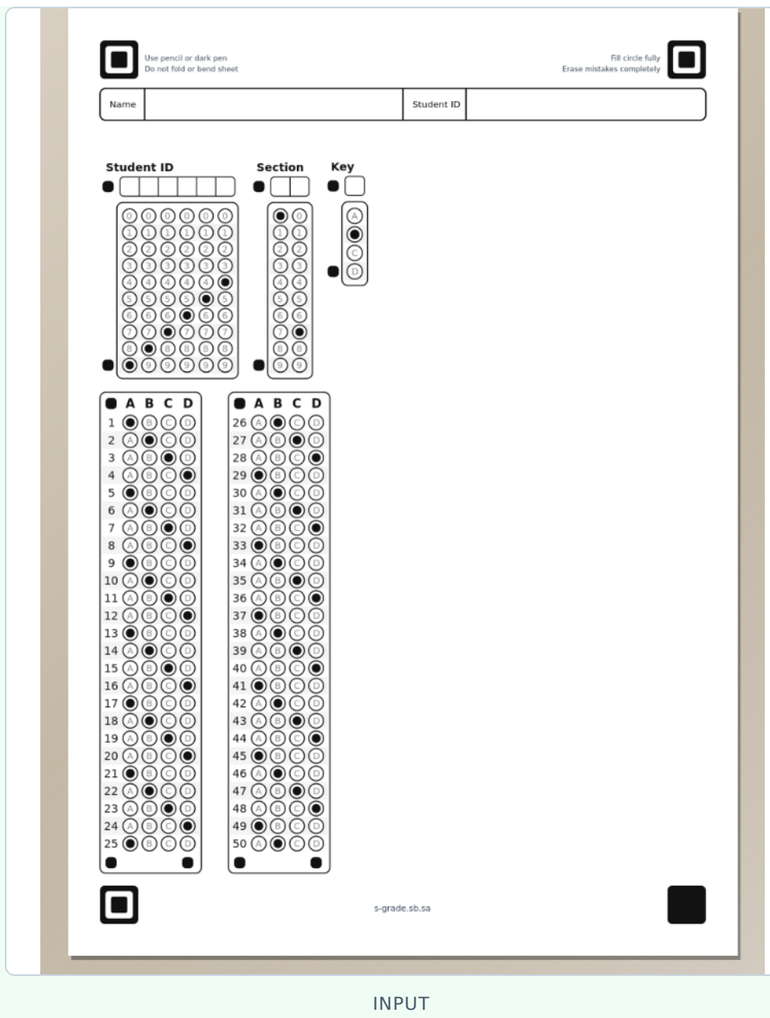
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

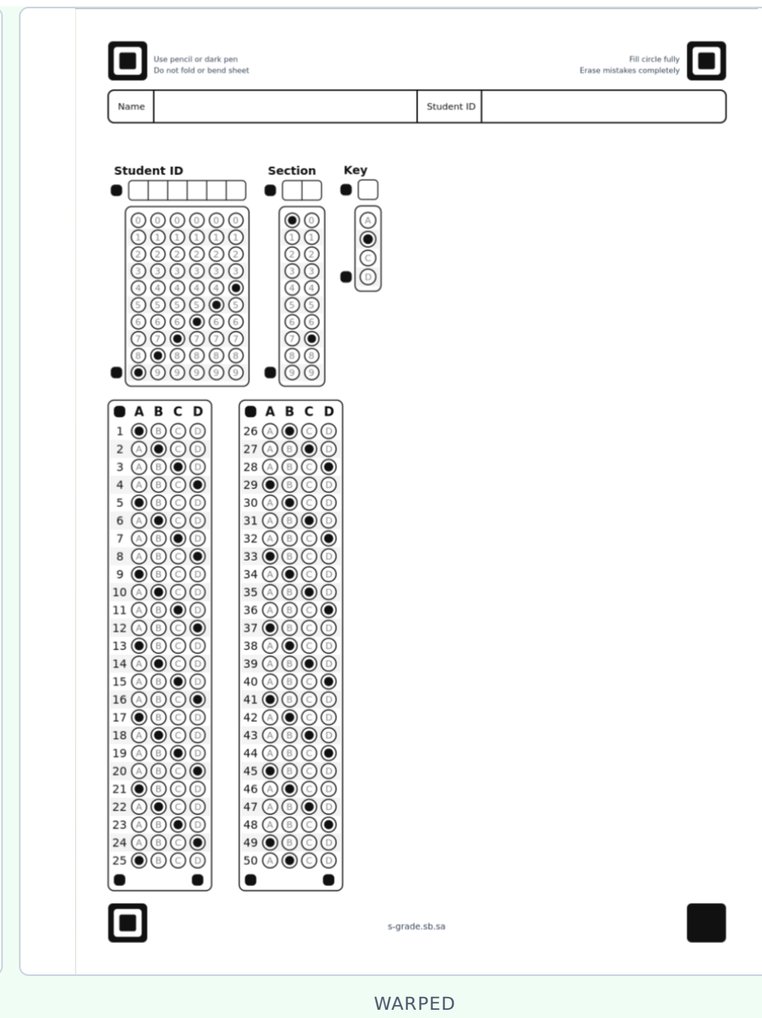
result.json

50q · crop portrait 3:4 — sheet edge-to-edge horizontally PASS

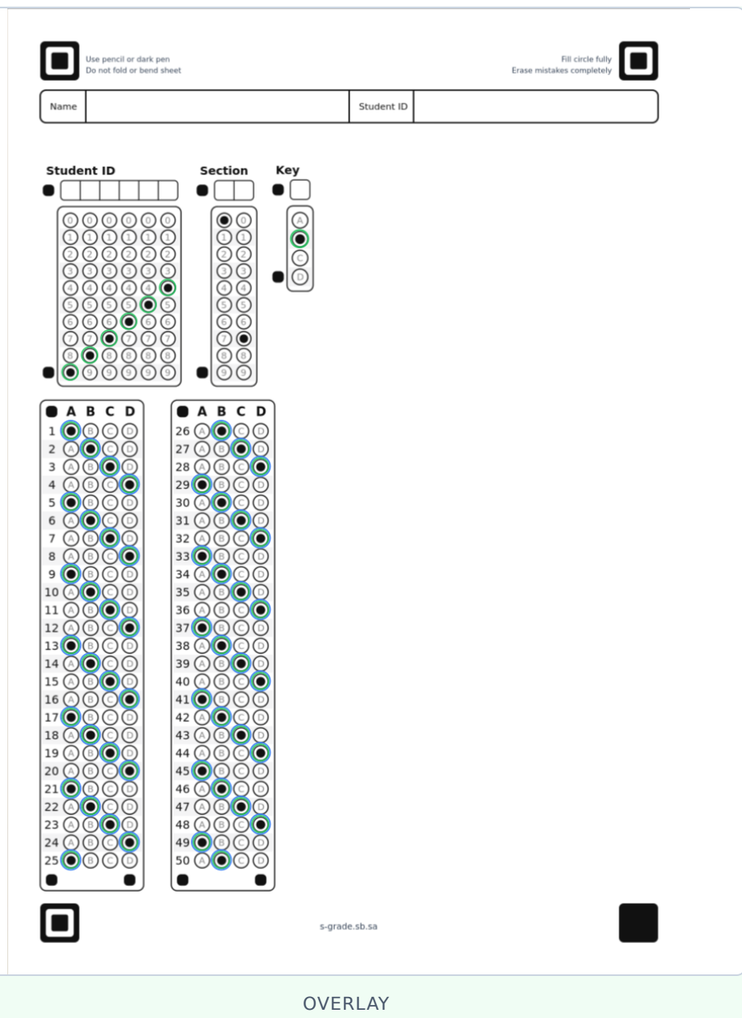
profile: `crop_3_4_portrait_tight` · 574 passed · 0 failed



INPUT



WARPED



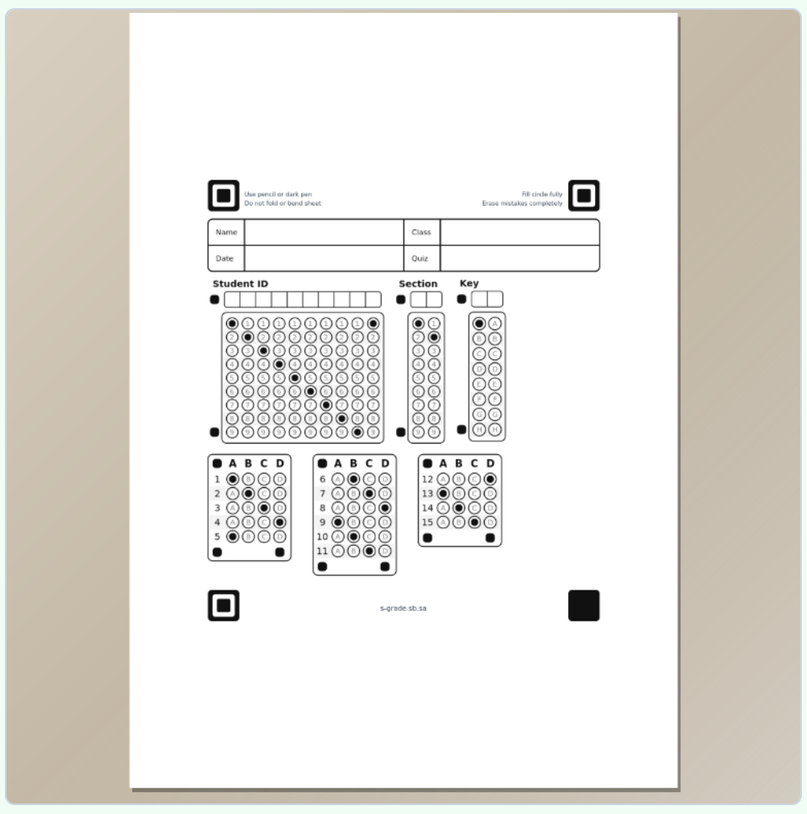
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

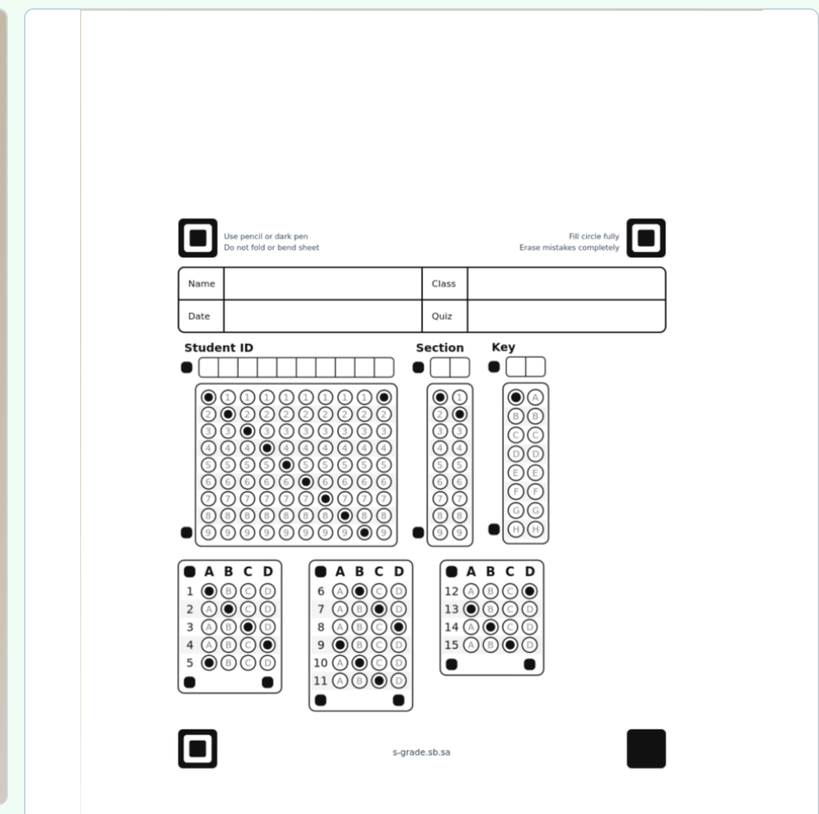
result.json

15q · short quiz · crop square (1:1) PASS

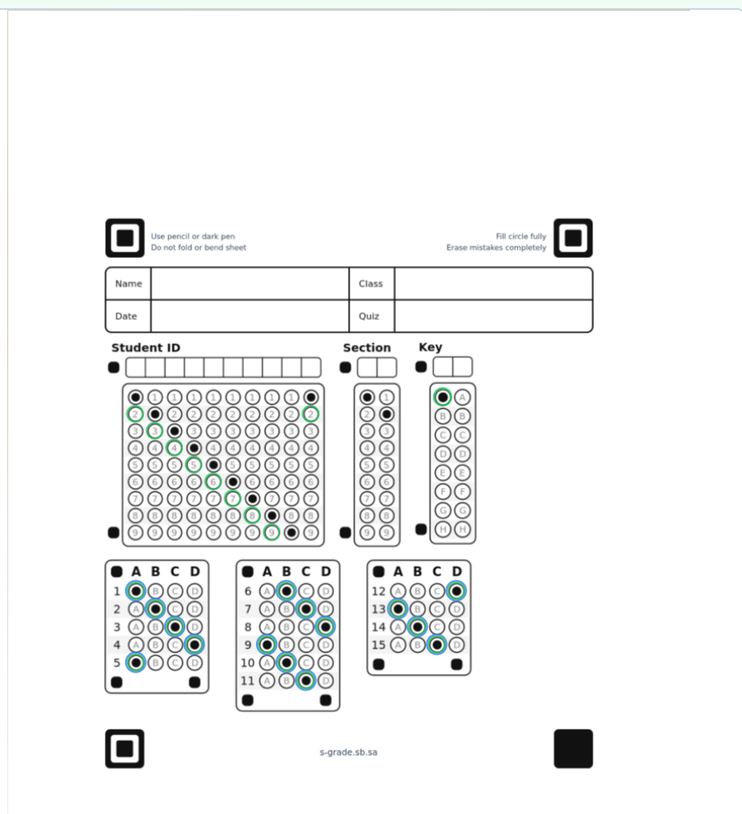
profile: `crop_square_tight` · 374 passed · 0 failed



INPUT



WARPED



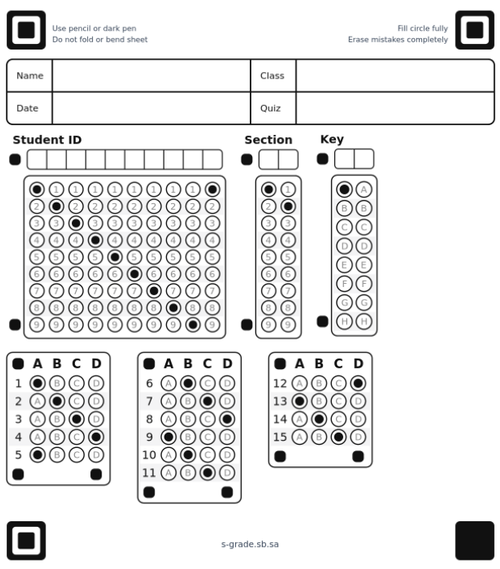
OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

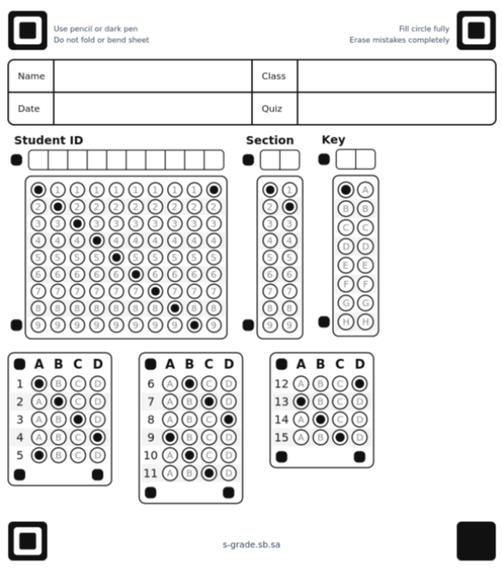
result.json

15q · short quiz · cropped to paper edges (no margin) PASS

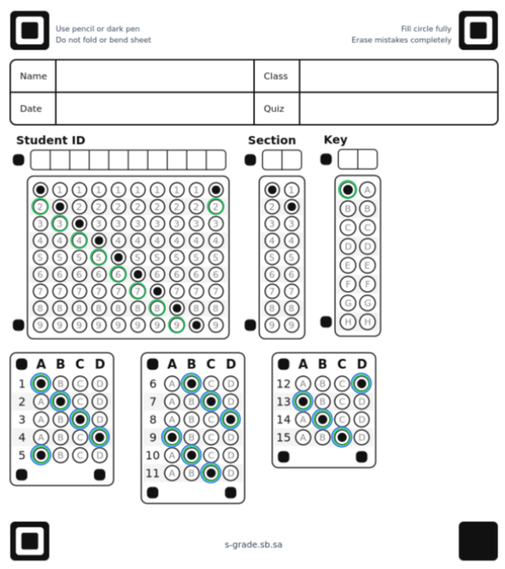
profile: `crop_to_paper_edges` · 374 passed · 0 failed



INPUT



WARPED



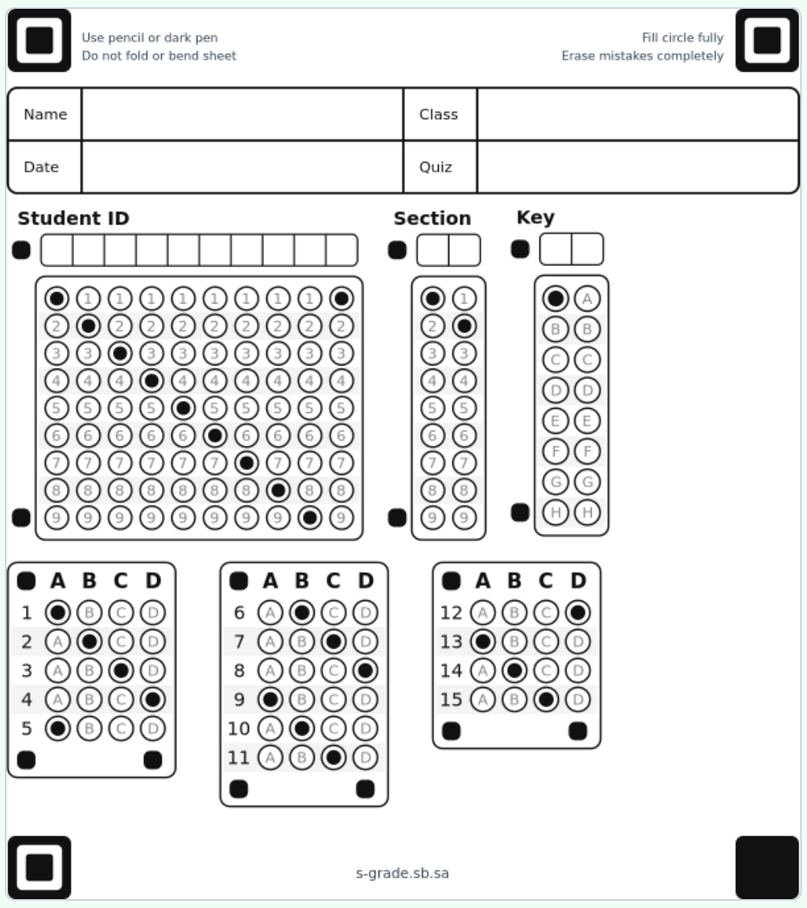
OVERLAY

field	expected	actual	
studentId	1234567891	1234567891	✓
form	A	A	✓
section	12	12	✓
score	15	15	✓

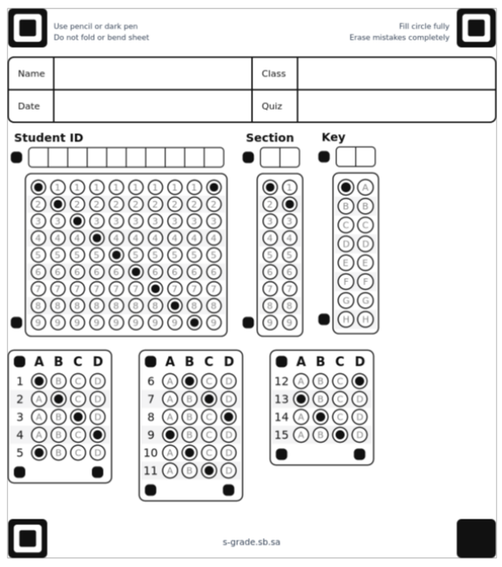
result.json

15q · short quiz · cropped to fiducial quad (edge fiducials) PASS

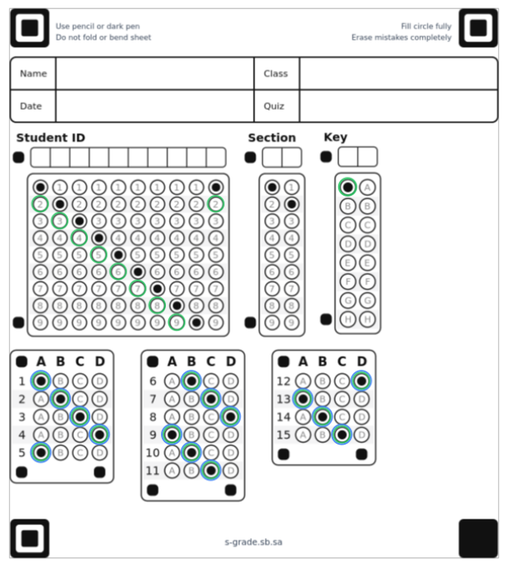
profile: `crop_to_fiducial_quad` · 374 passed · 0 failed



INPUT



WARPED



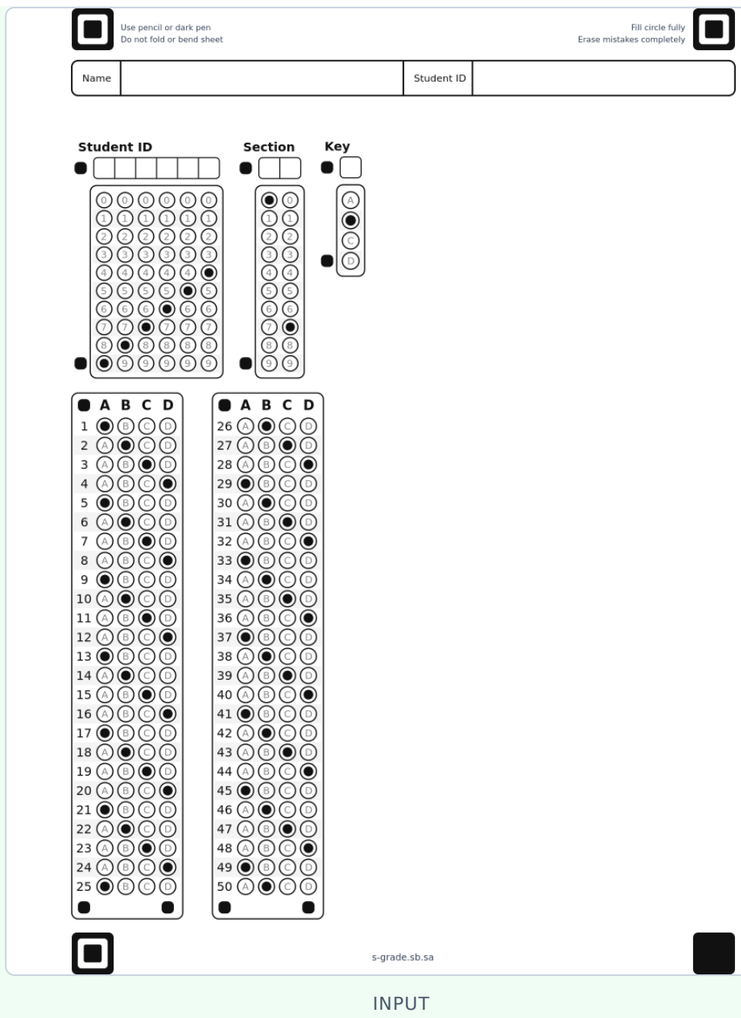
OVERLAY

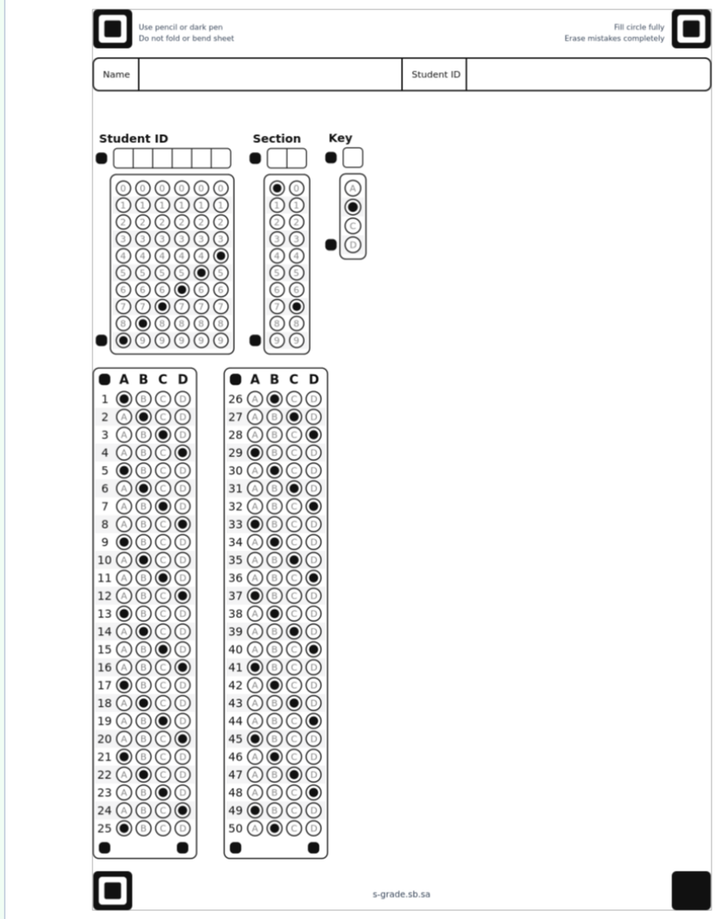
field	expected	actual	
studentId	1234567891	1234567891	✓
form	A	A	✓
section	12	12	✓
score	15	15	✓

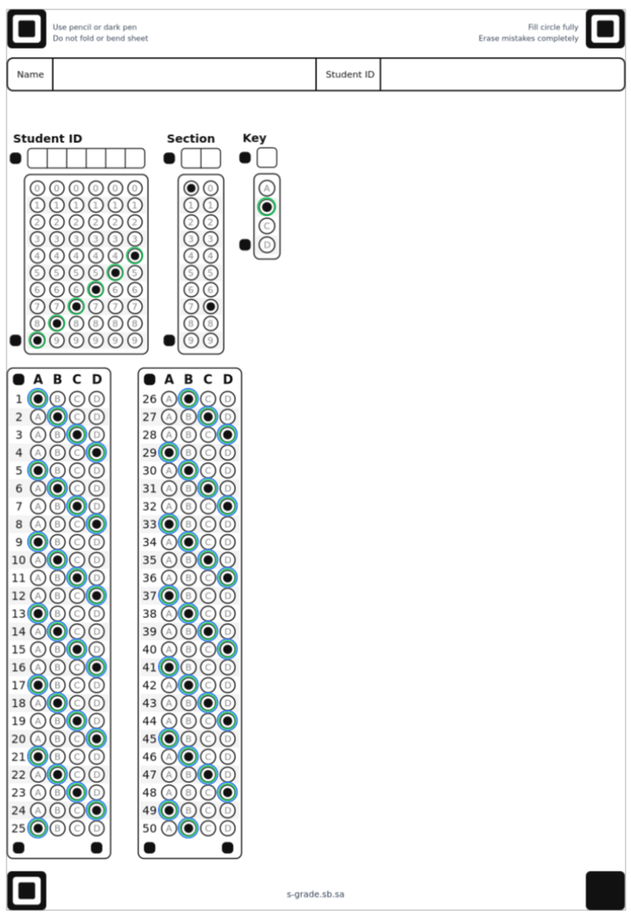
result.json

50q · mid · cropped to fiducial quad (edge fiducials) PASS

profile: `crop_to_fiducial_quad` · 574 passed · 0 failed







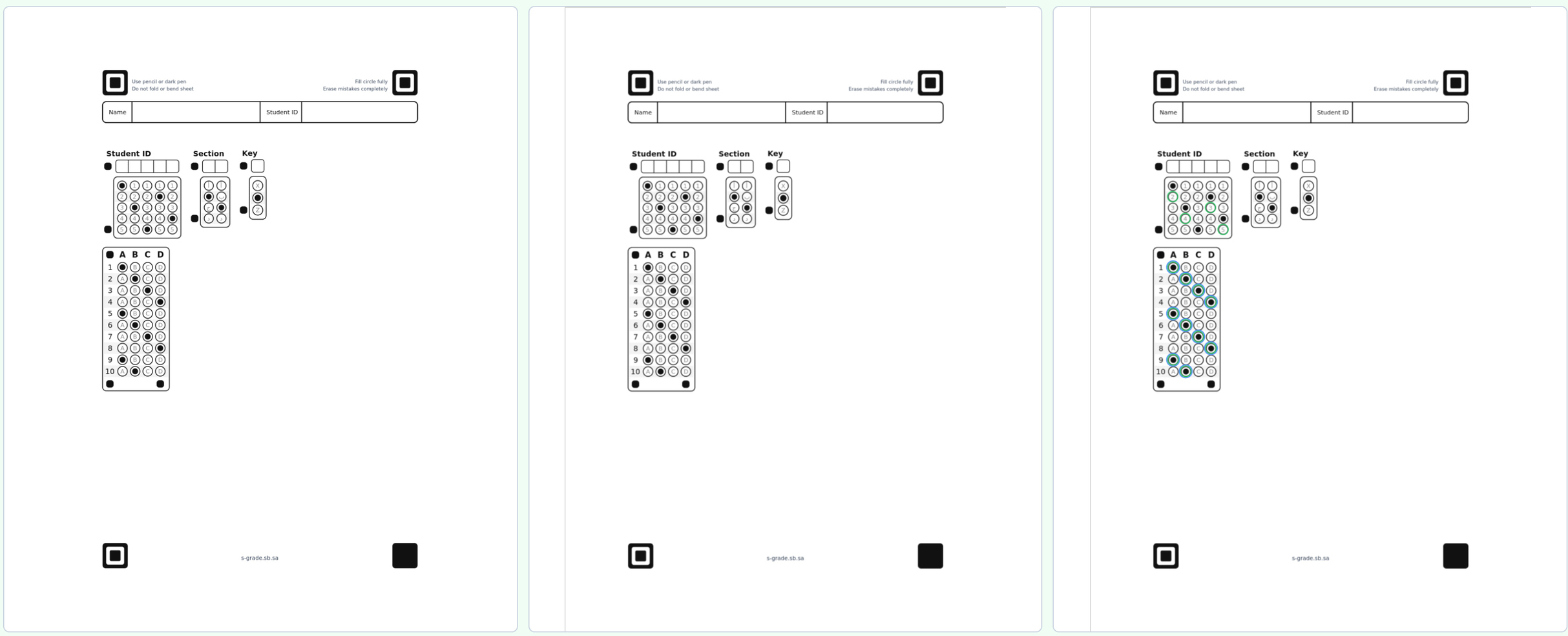
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

10q · custom-labels (SID 1-5, sec د-أ, key X-Z) · pristine PASS

profile: `pristine` · 158 passed · 0 failed



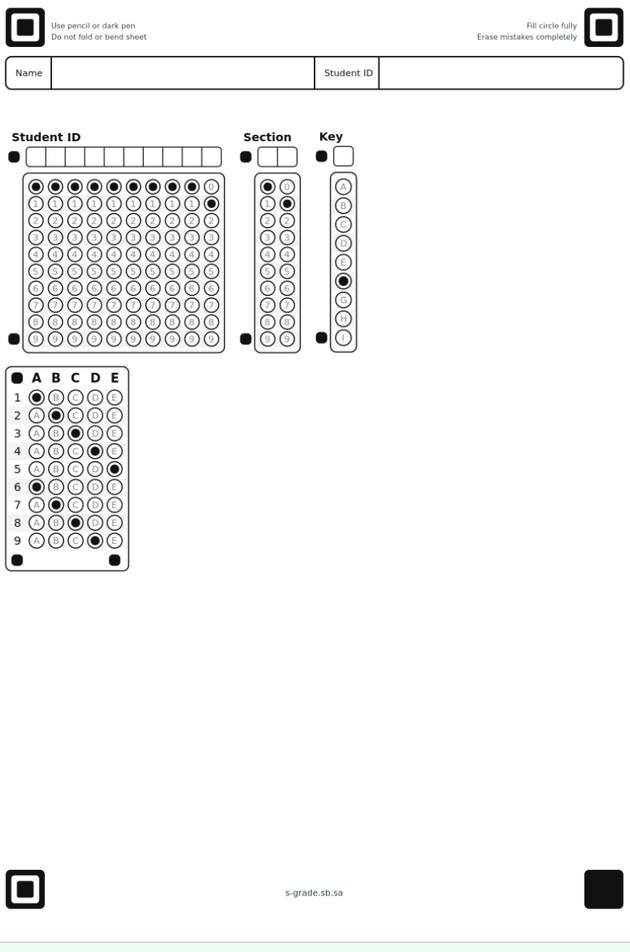
INPUT WARPED OVERLAY

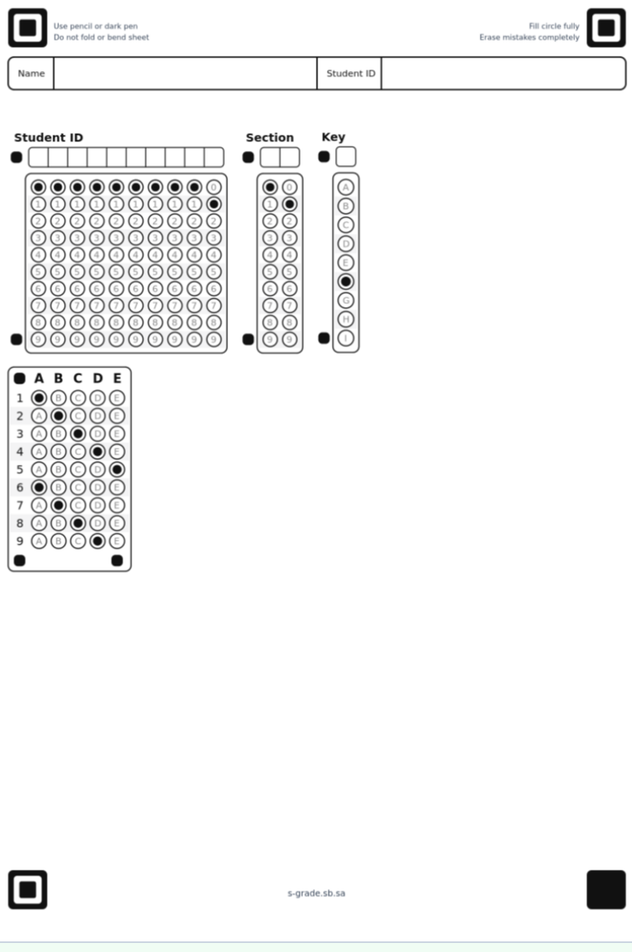
field	expected	actual	
studentId	`13524`	`13524`	✓
form	`Y`	`Y`	✓
section	`د-أ`	`د-أ`	✓
score	`10`	`10`	✓

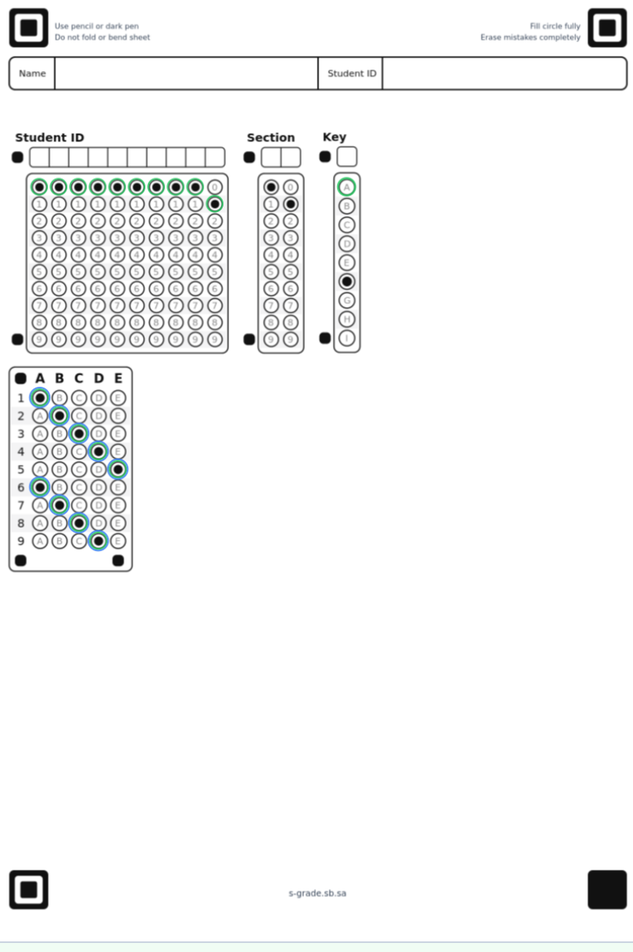
result.json

alerts · form code shaded on disabled row (F on A-only quiz) PASS

profile: `pristine` · 353 passed · 0 failed







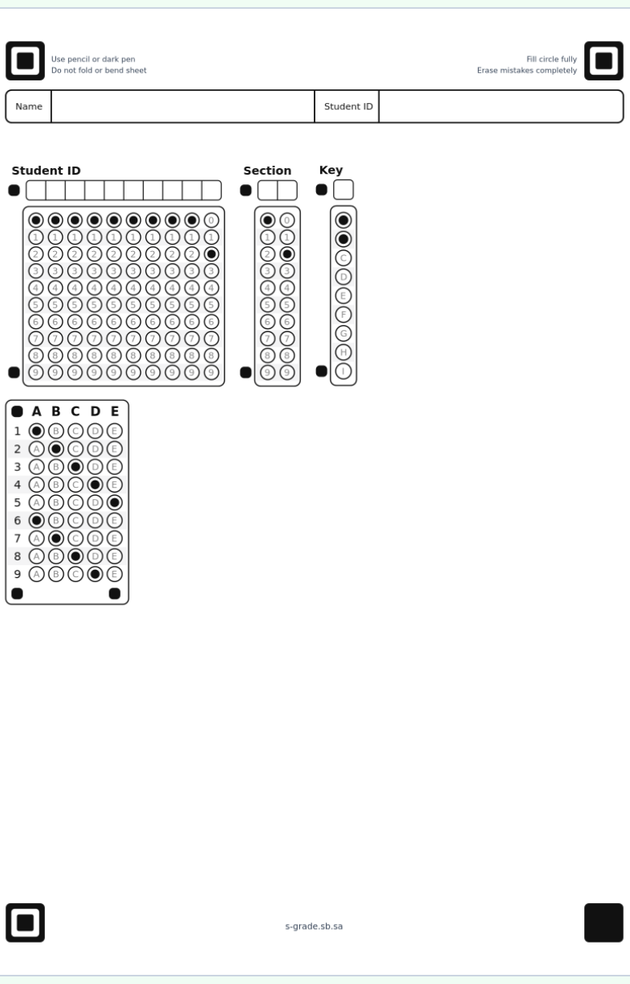
INPUT WARPED OVERLAY

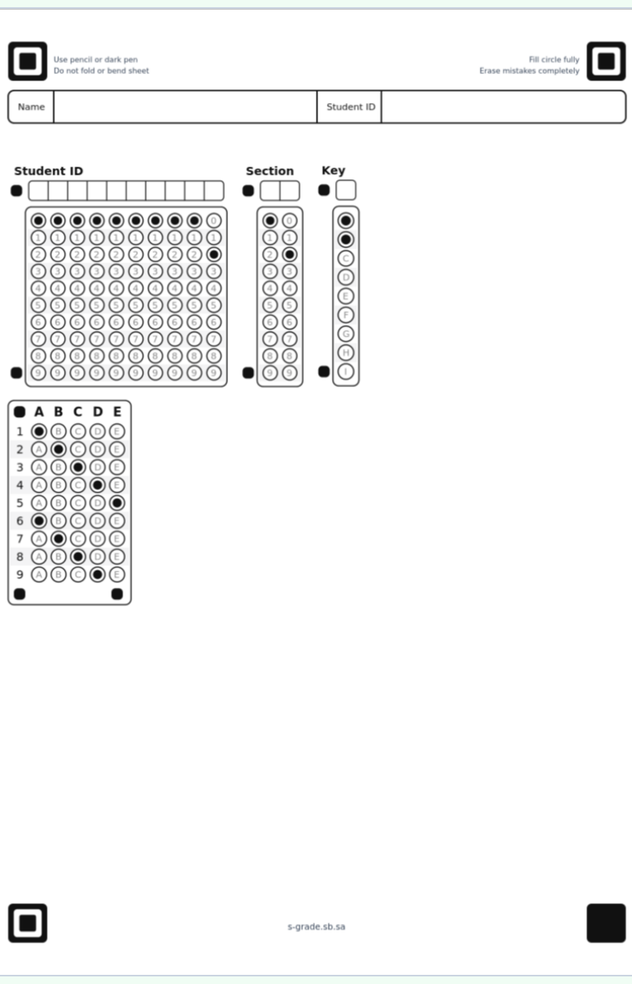
field	expected	actual	
studentId	`0000000001`	`0000000001`	✓
form	`A`	`A`	✓
section	`01`	`01`	✓
score	`9`	`9`	✓

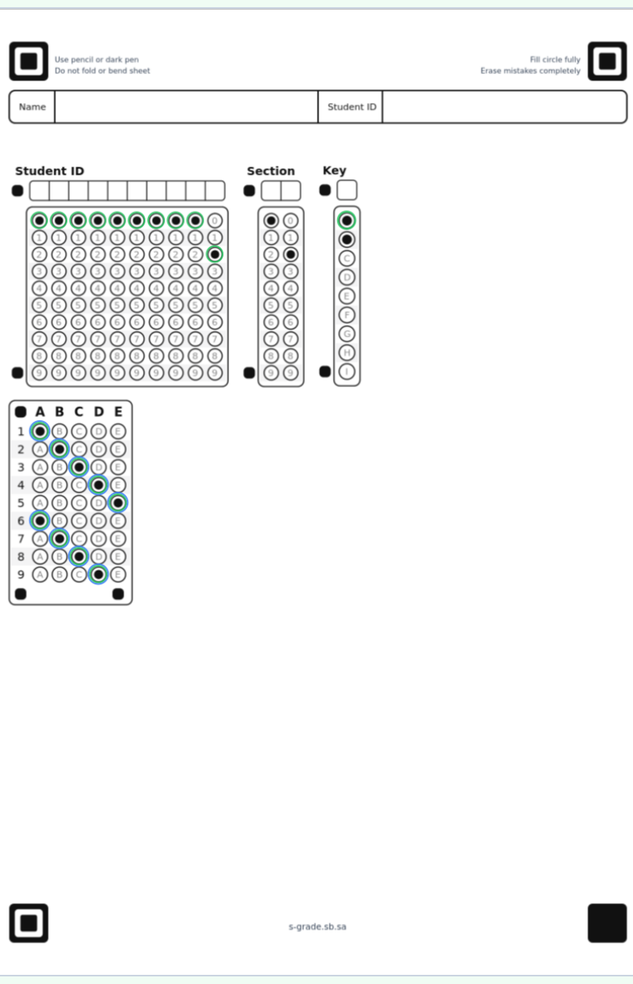
result.json

alerts · form code has multiple filled bubbles PASS

profile: `pristine` · 352 passed · 0 failed







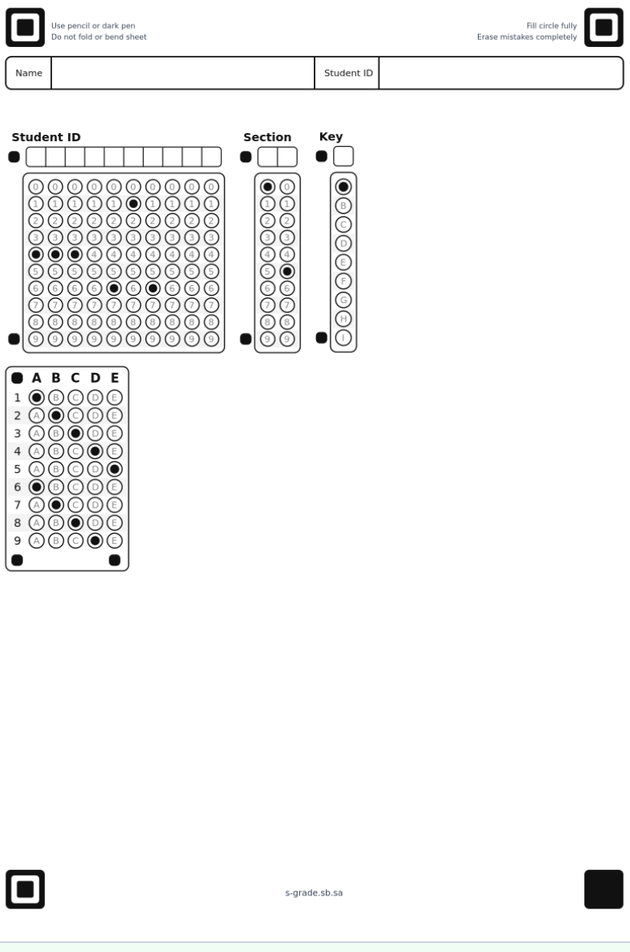
INPUT WARPED OVERLAY

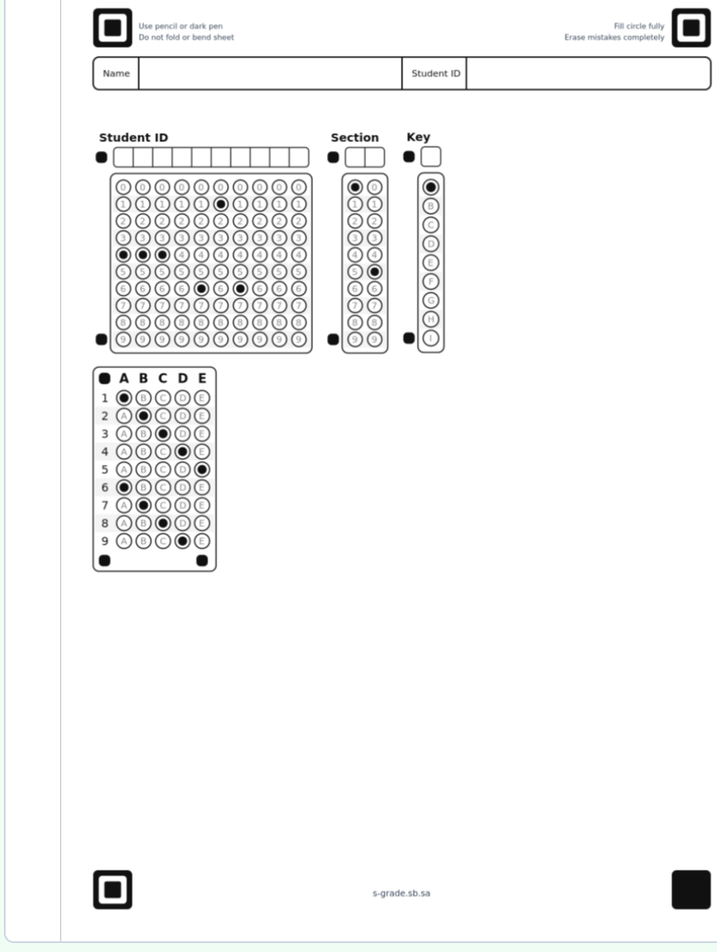
field	expected	actual	
studentId	`0000000002`	`0000000002`	✓
form	`A`	`A`	✓
section	`02`	`02`	✓
score	`9`	`9`	✓

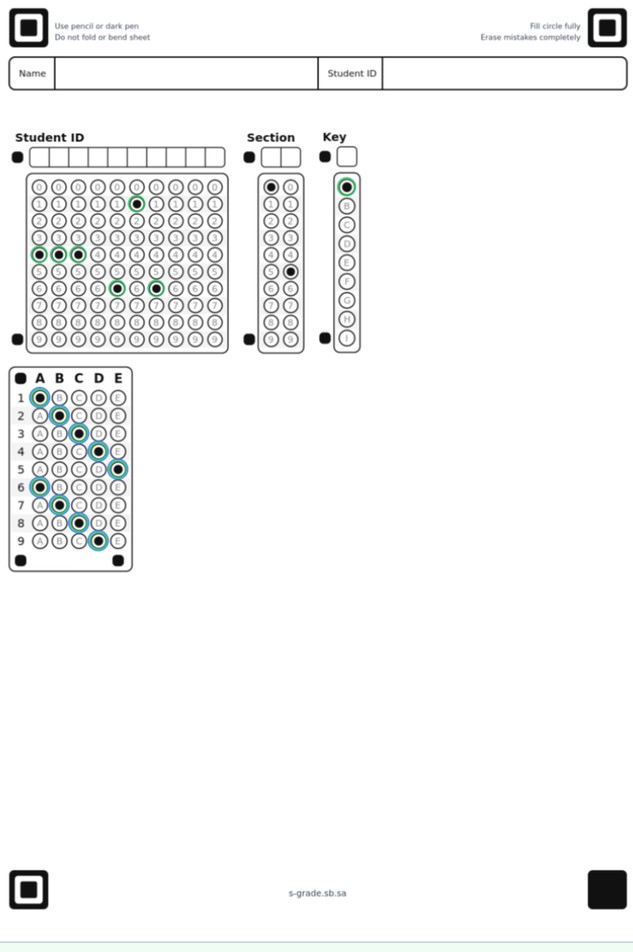
result.json

alerts · student ID has a missing digit in the middle PASS

profile: `pristine` · 352 passed · 0 failed







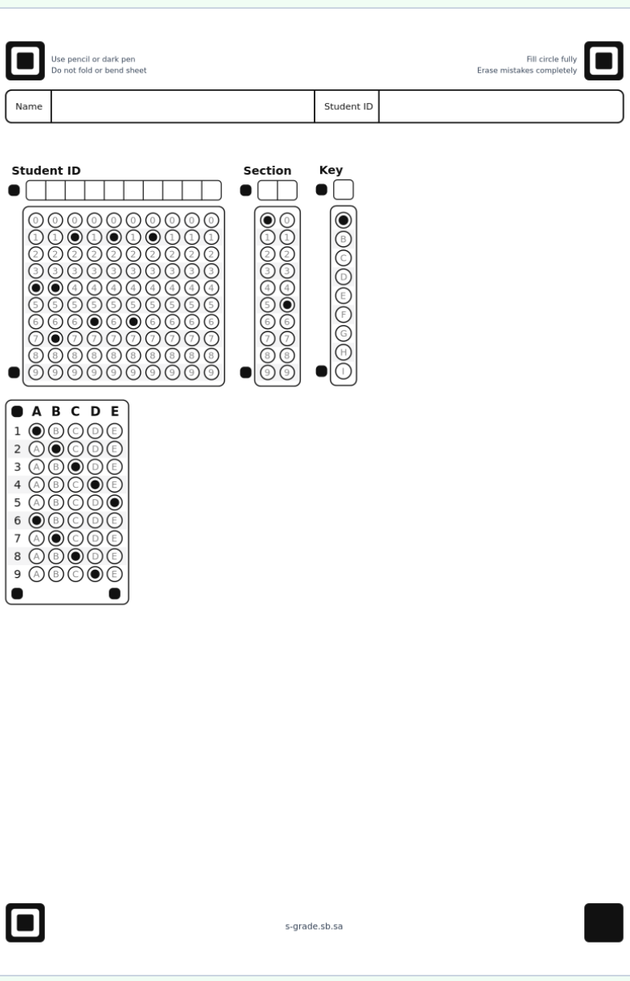
INPUT WARPED OVERLAY

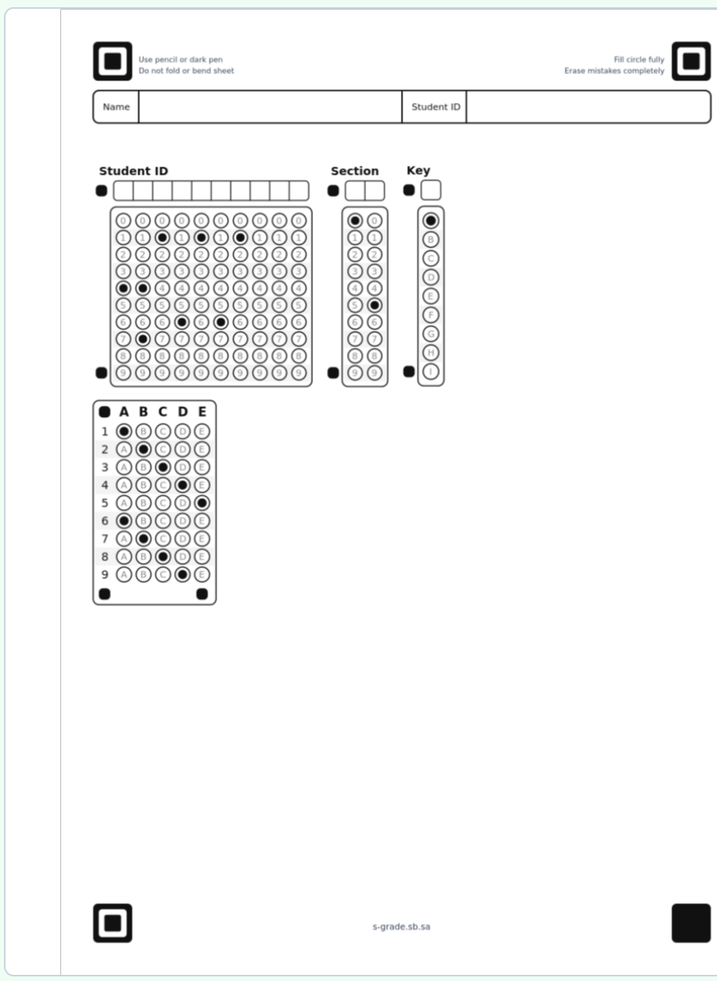
field	expected	actual	
studentId	`444616`	`444616`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`9`	`9`	✓

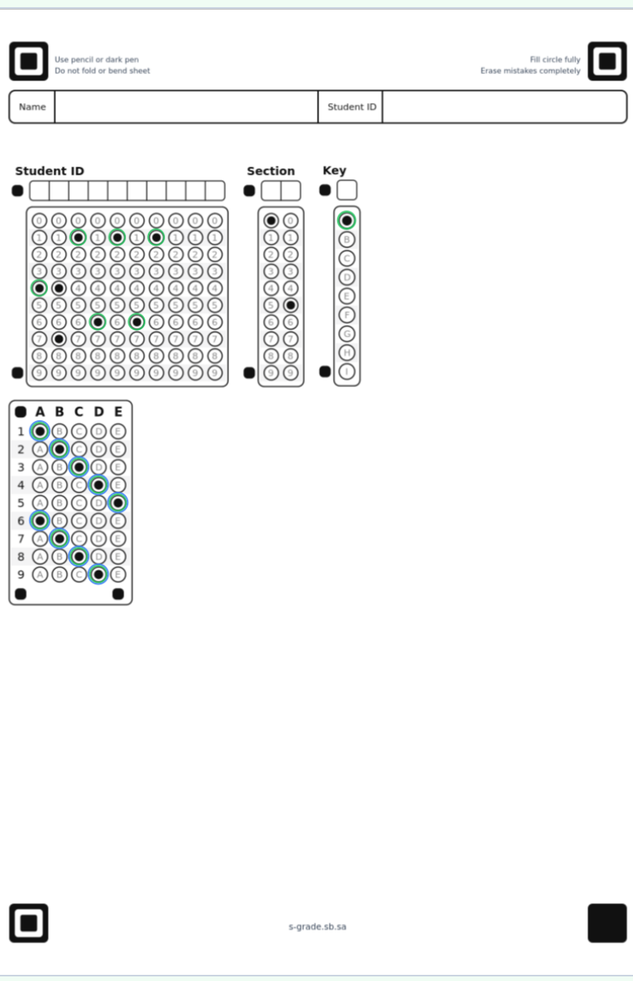
result.json

alerts · student ID has multiple filled bubbles PASS

profile: `pristine` · 353 passed · 0 failed







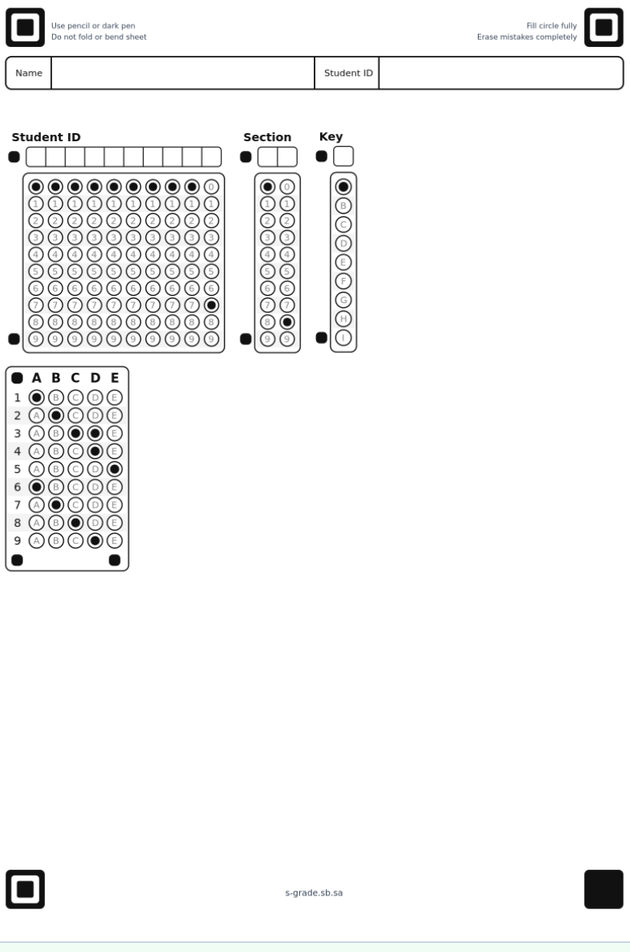
INPUT WARPED OVERLAY

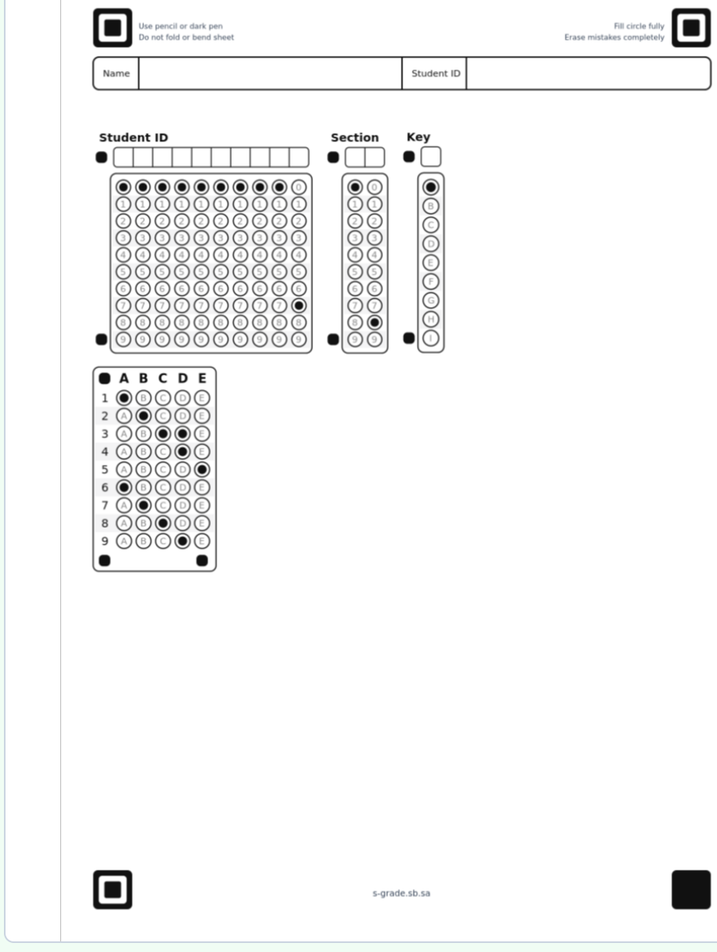
field	expected	actual	
studentId	`4416161`	`416161`	✗
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`9`	`9`	✓

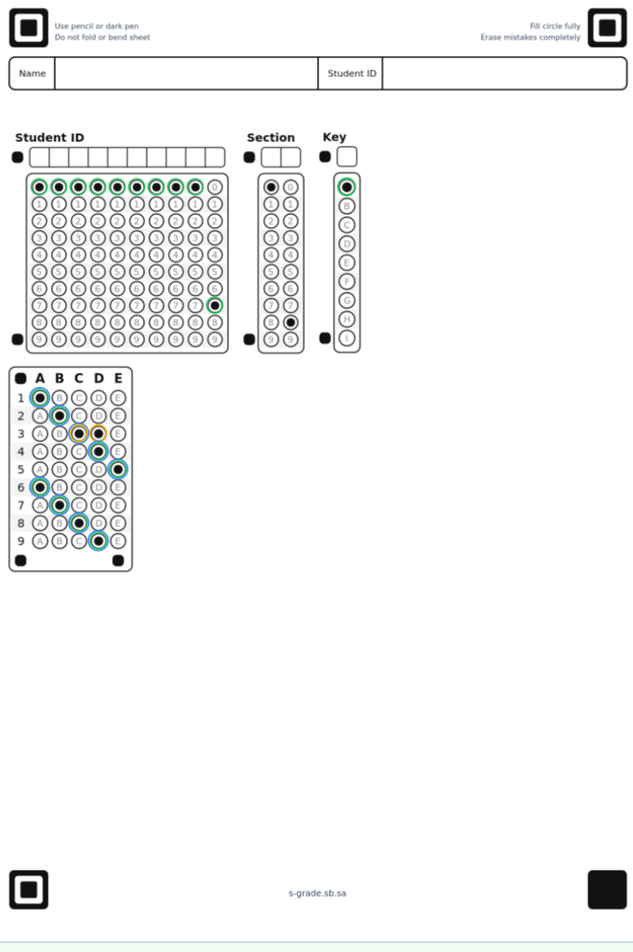
result.json

alerts · question Q3 has multiple filled bubbles PASS

profile: `pristine` · 351 passed · 0 failed







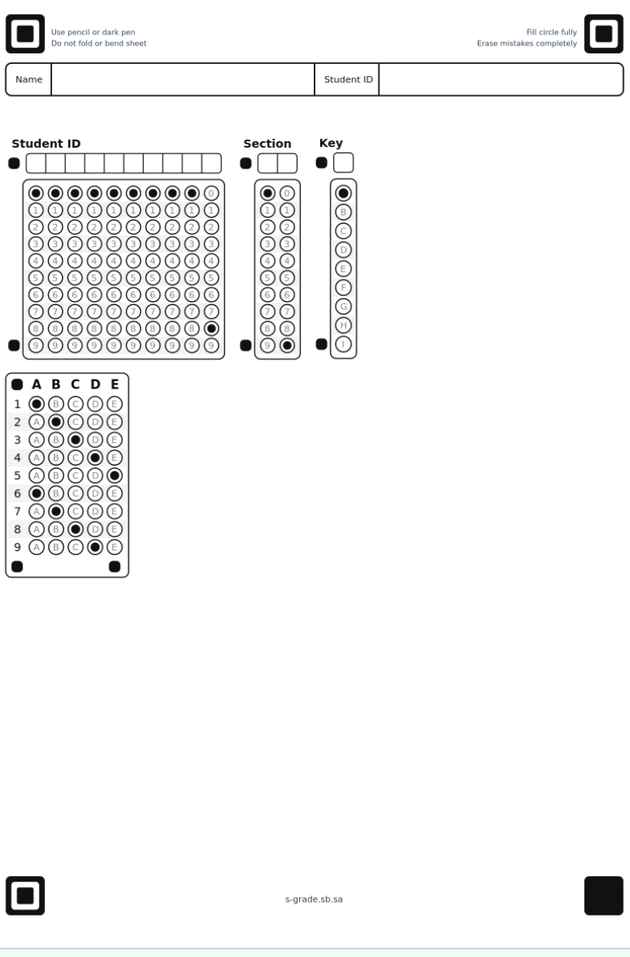
INPUT WARPED OVERLAY

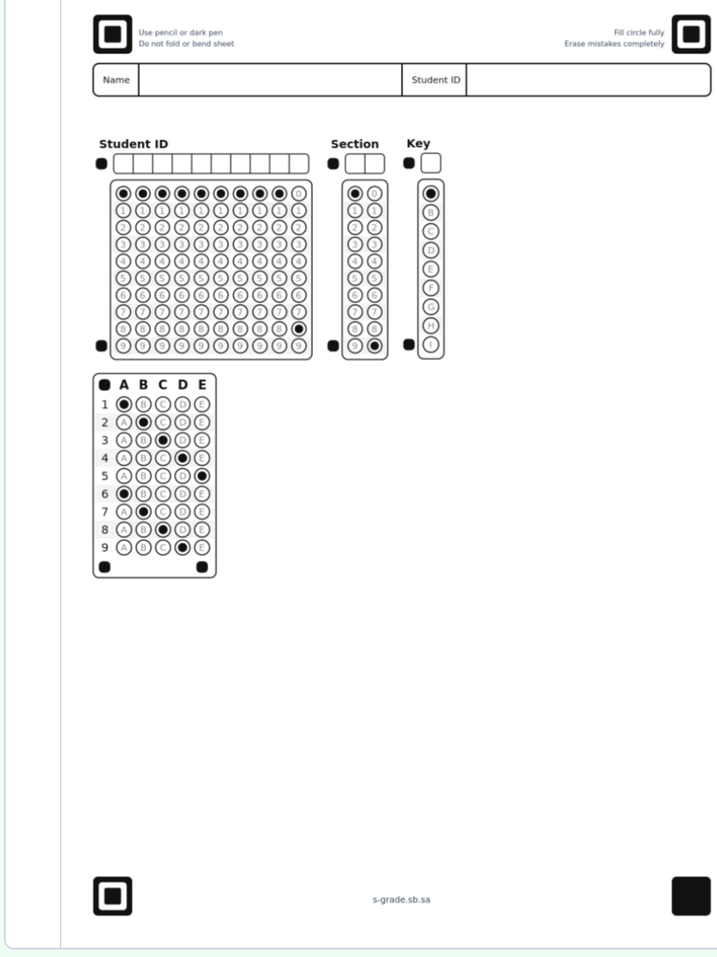
field	expected	actual	
studentId	`0000000007`	`0000000007`	✓
form	`A`	`A`	✓
section	`08`	`08`	✓
score	`8`	`8`	✓

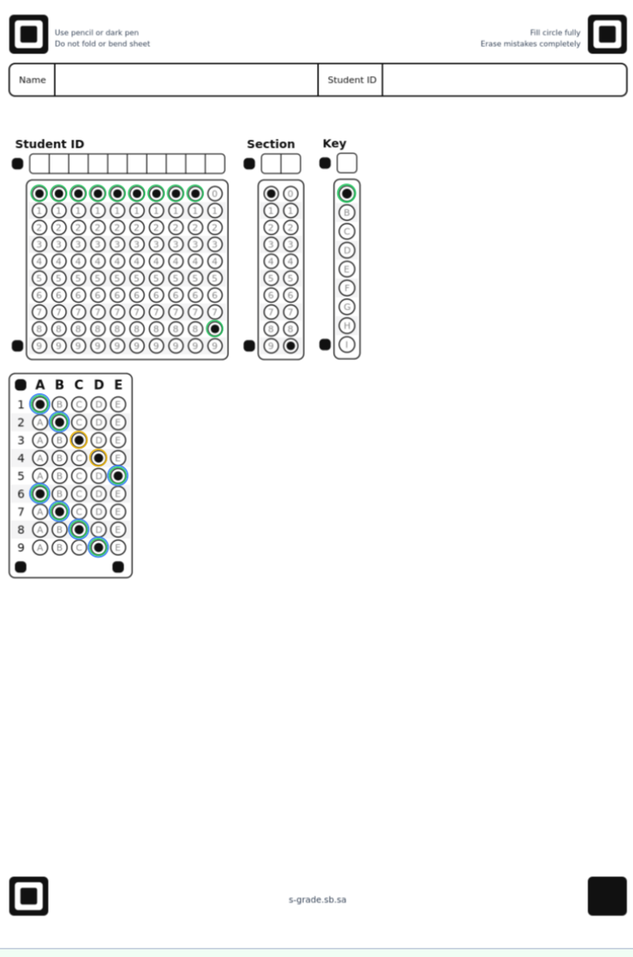
result.json

alerts · question has unclear (unkeyed) mark PASS

profile: `pristine` · 352 passed · 0 failed







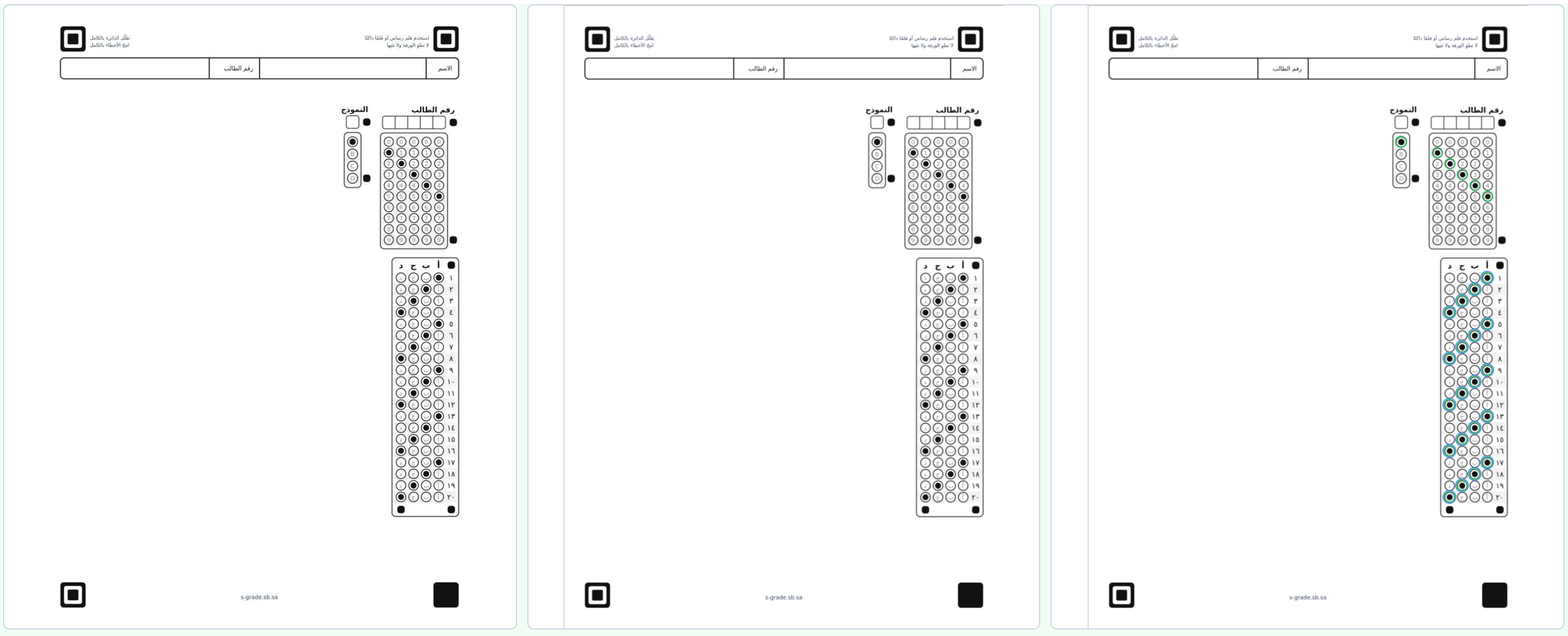
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`0000000008`	`0000000008`	✓
form	`A`	`A`	✓
section	`09`	`09`	✓
score	`7`	`7`	✓

result.json

[AR] 20q 5-id 1-col no-section · pristine PASS

profile: `pristine` · 273 passed · 0 failed



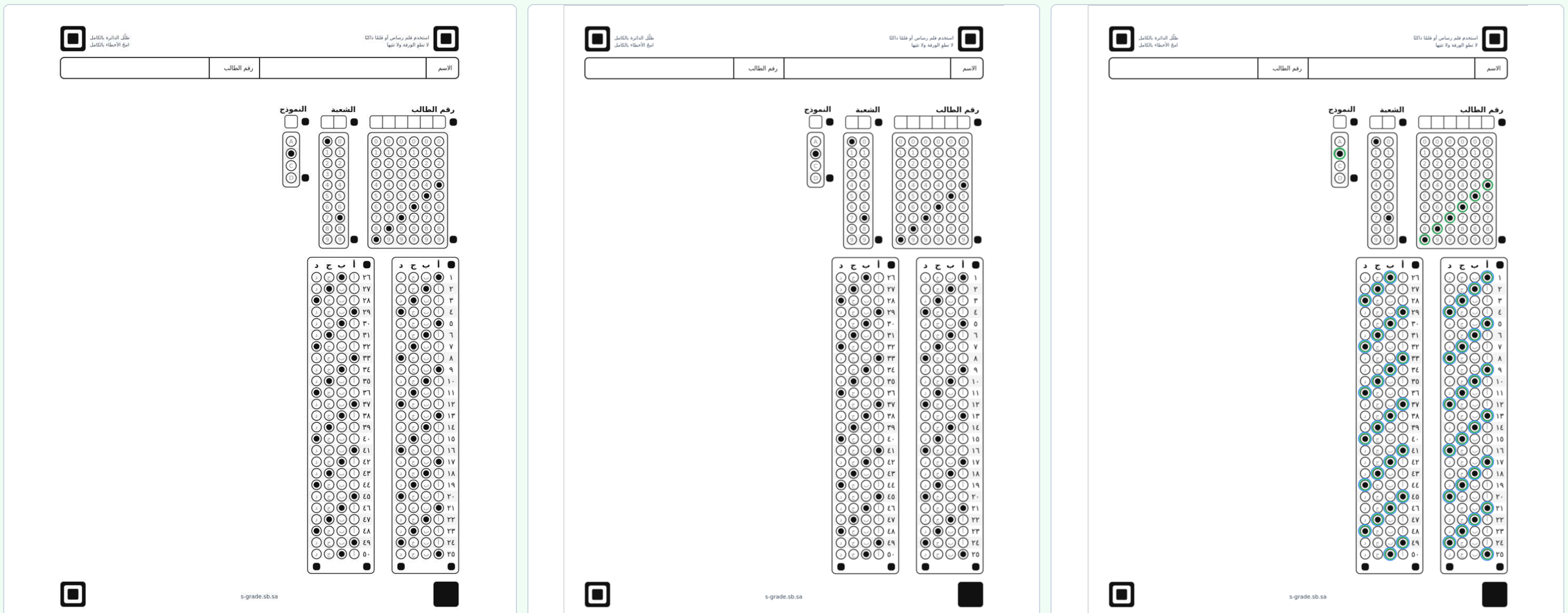
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`20`	`20`	✓

result.json

[AR] 50q 6-id 2-col with-section · pristine PASS

profile: `pristine` · 574 passed · 0 failed



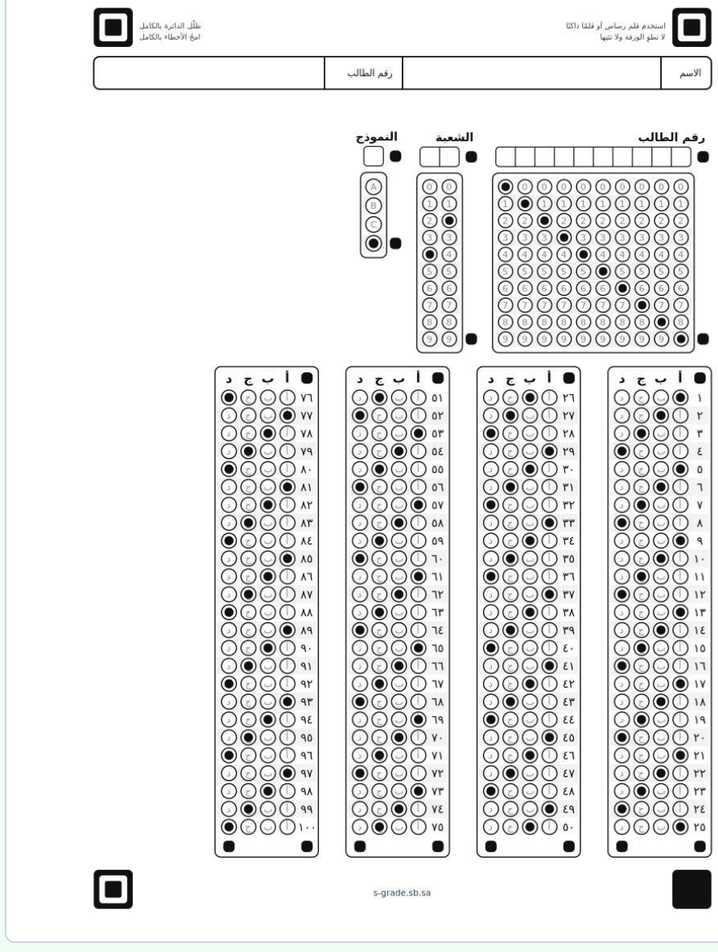
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

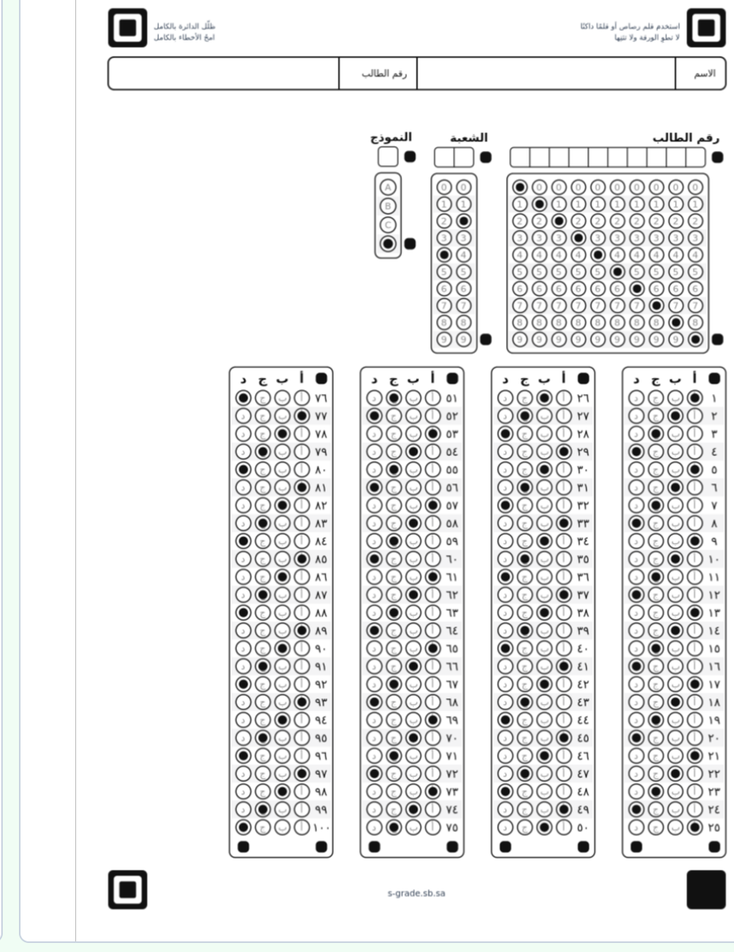
result.json

[AR] 100q 10-id 4-col with-section · pristine PASS

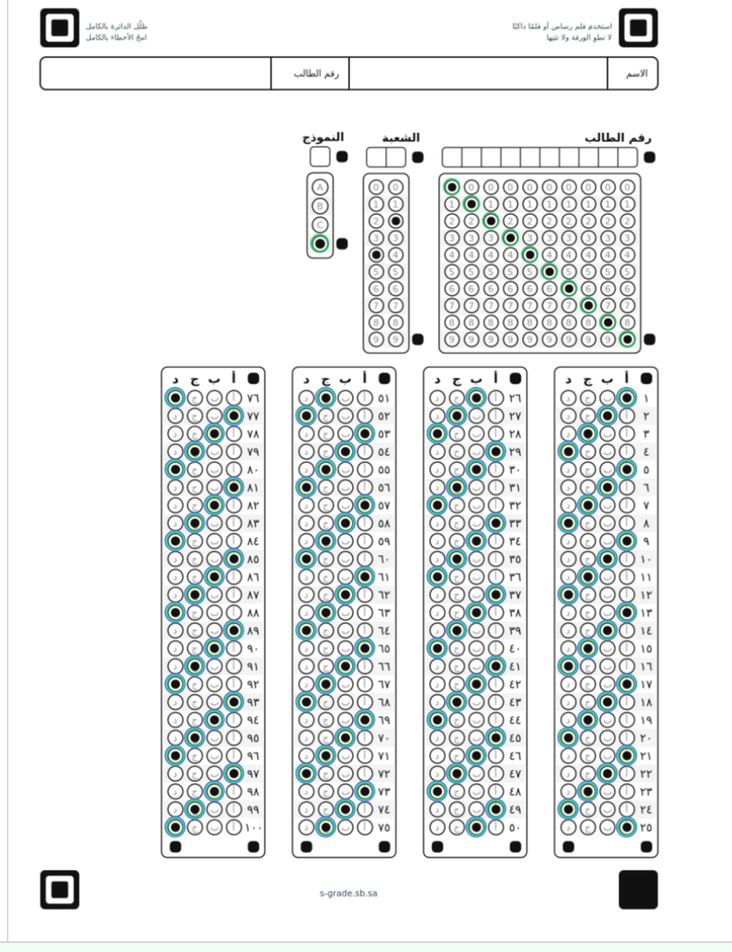
profile: `pristine` · 1054 passed · 0 failed



INPUT



WARPED



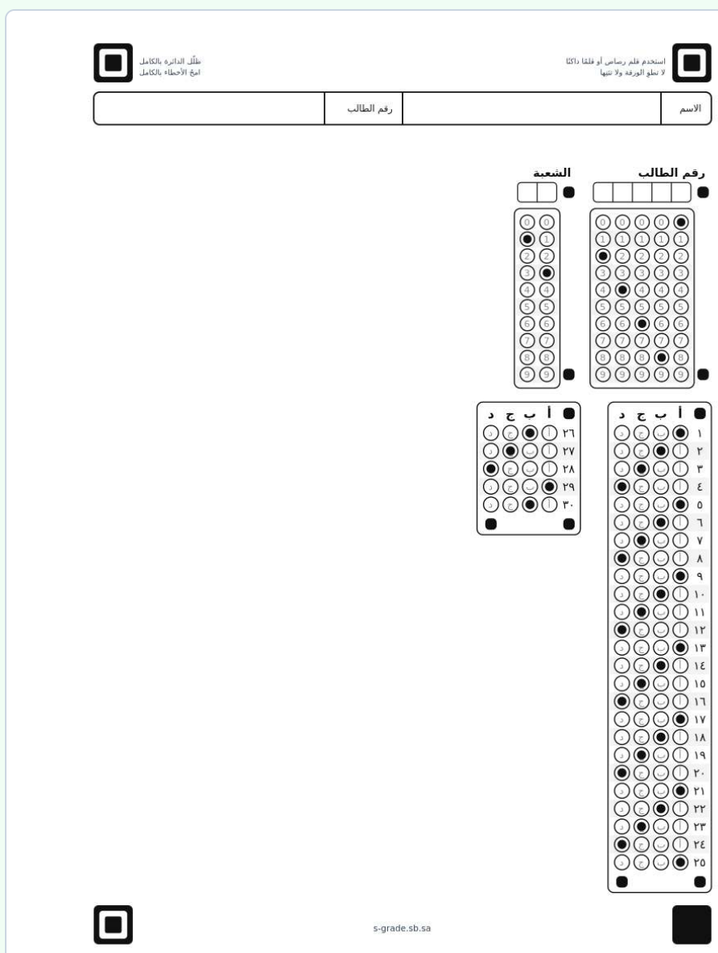
OVERLAY

field	expected	actual	
studentId	`0123456789`	`0123456789`	✓
form	`D`	`D`	✓
section	`42`	`42`	✓
score	`100`	`100`	✓

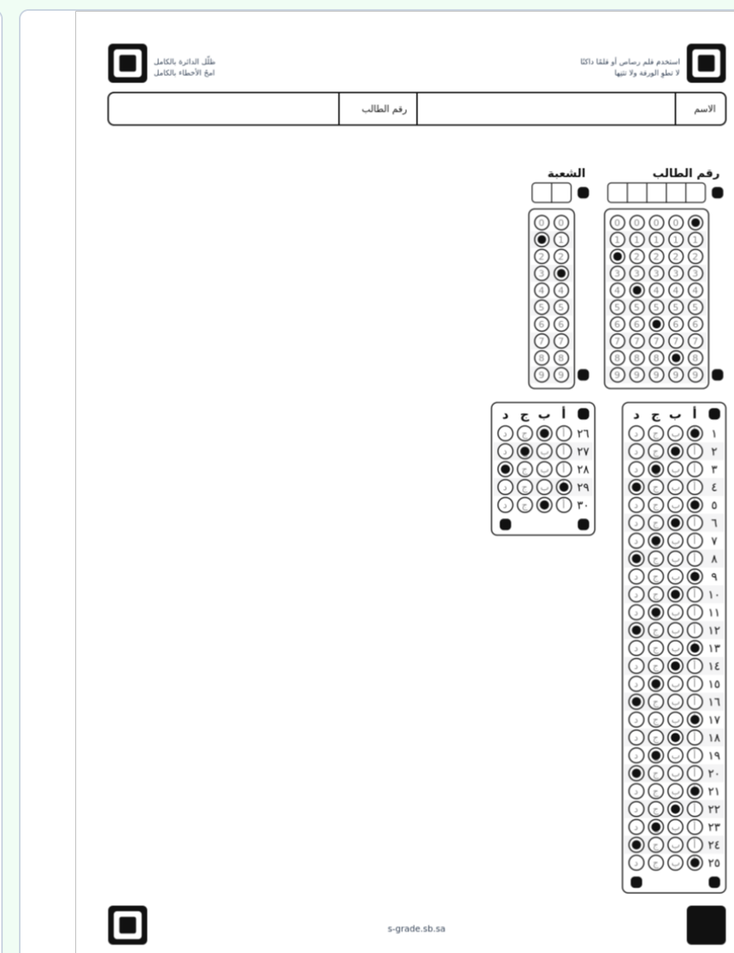
result.json

[AR] 30q · no Key zone (hasFormCode=false) PASS

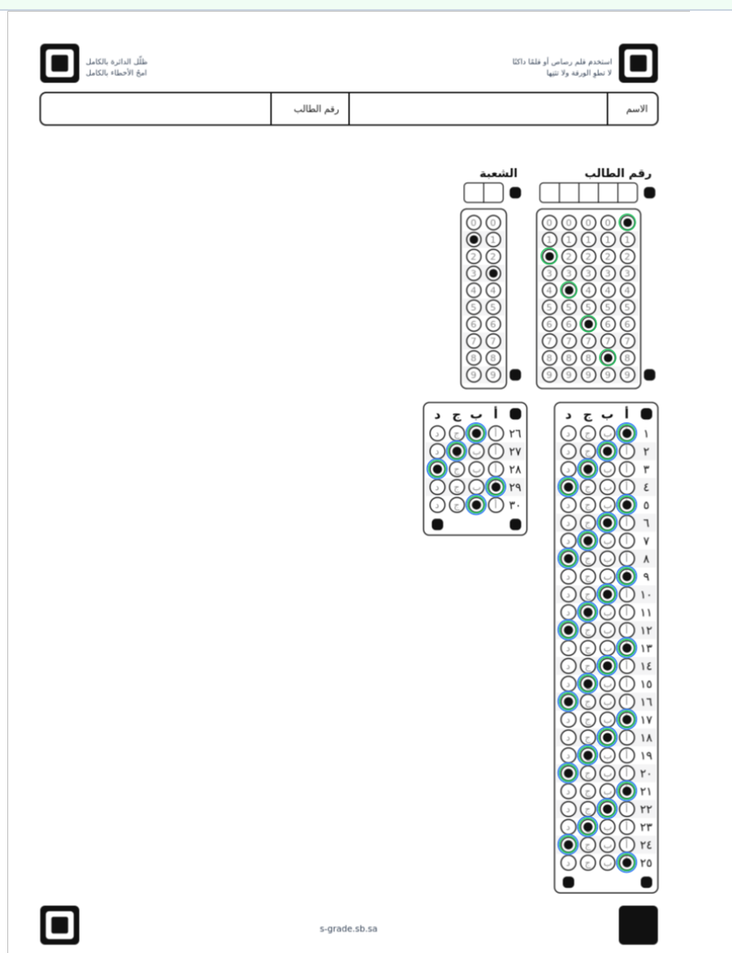
profile: `pristine` · 386 passed · 0 failed



INPUT



WARPED



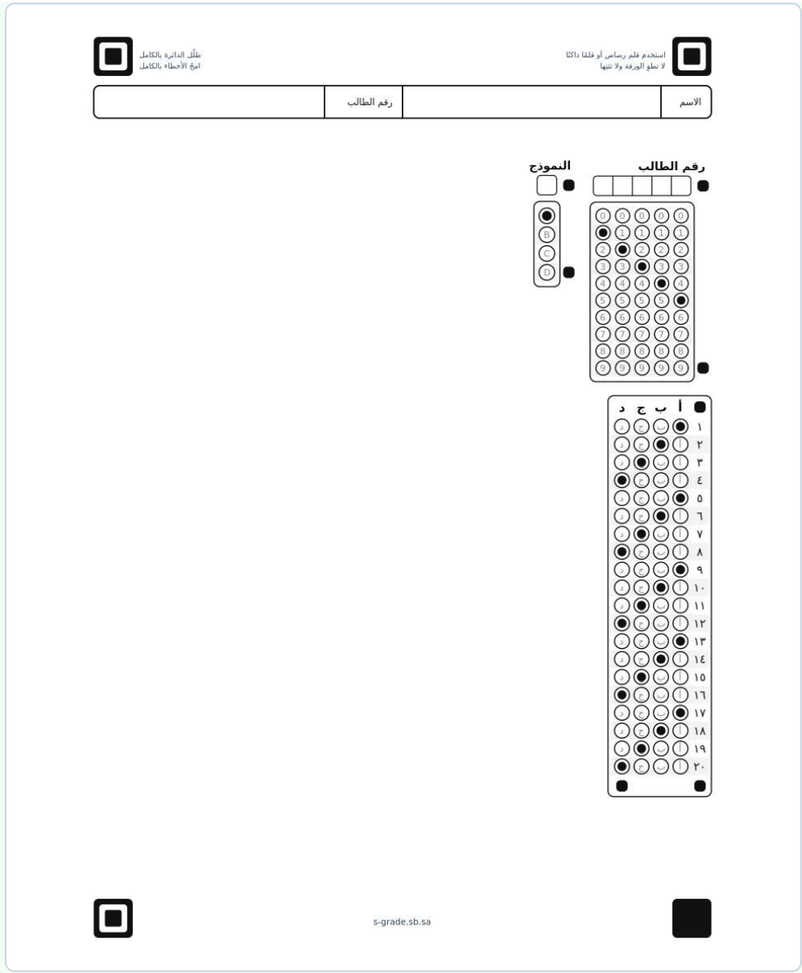
OVERLAY

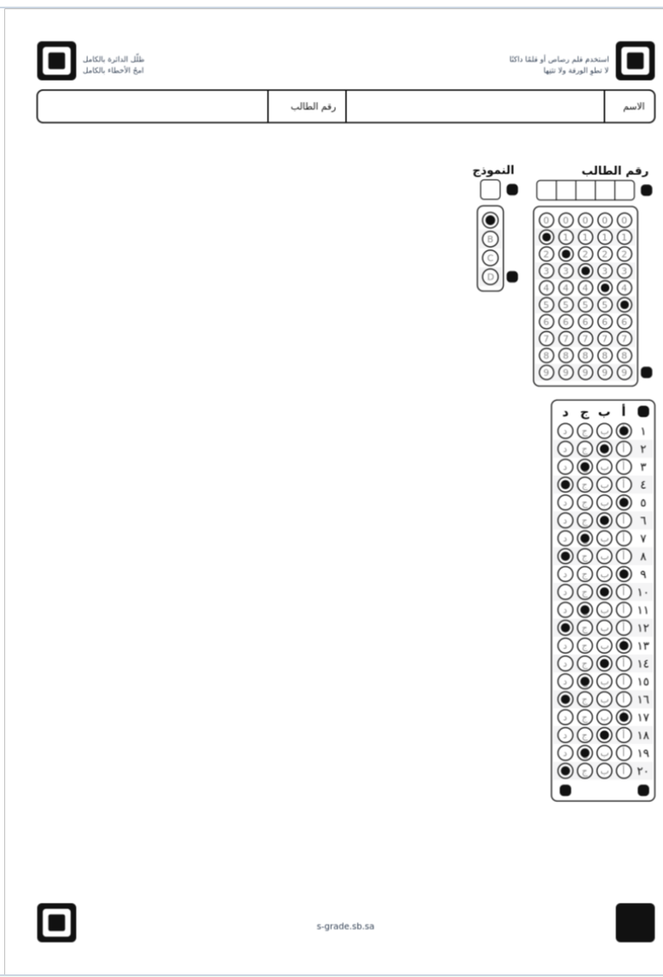
field	expected	actual	
studentId	`24680`	`24680`	✓
form	`A`	`A`	✓
section	`13`	`13`	✓
score	`30`	`30`	✓

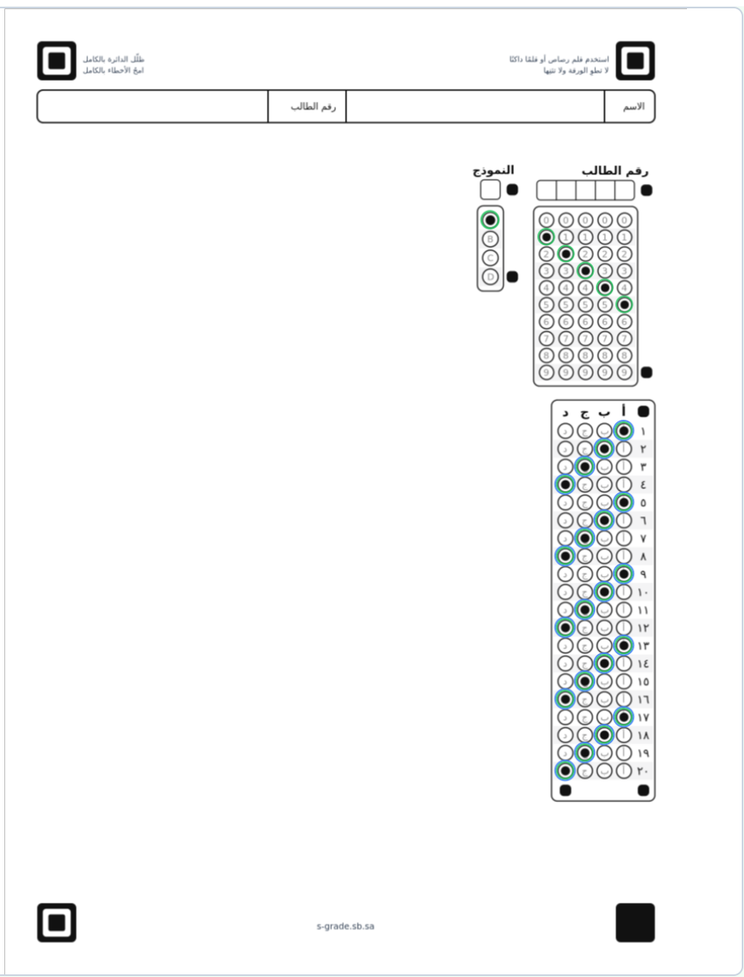
result.json

[AR] 20q · no section zone (hasSectionSelector=false) PASS

profile: `pristine` · 273 passed · 0 failed







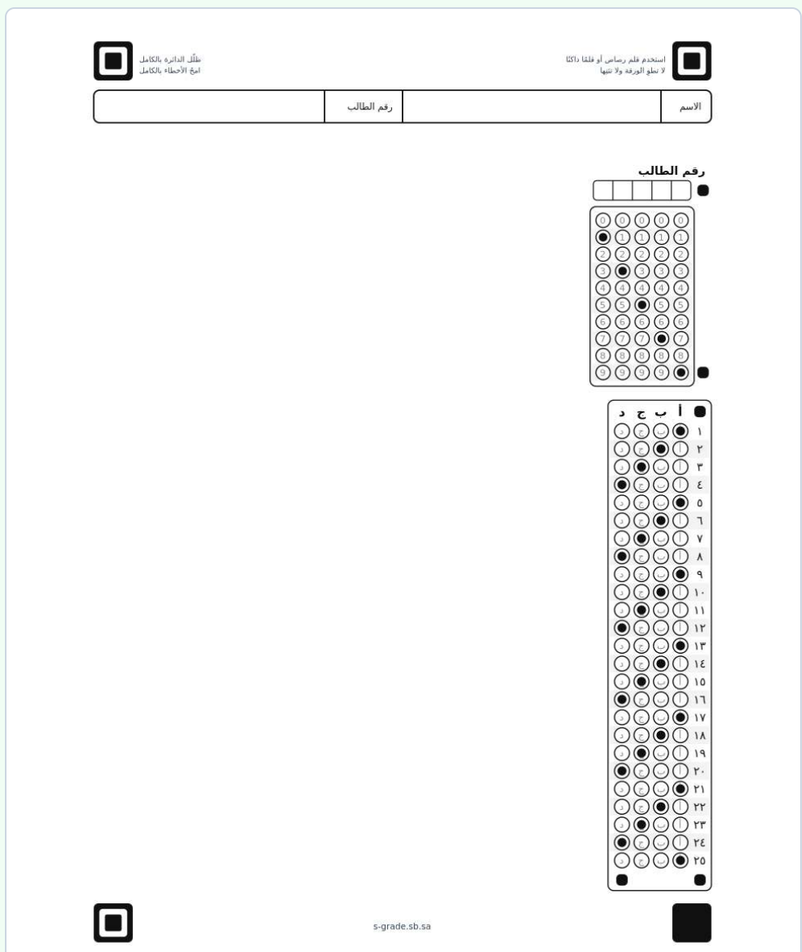
INPUT WARPED OVERLAY

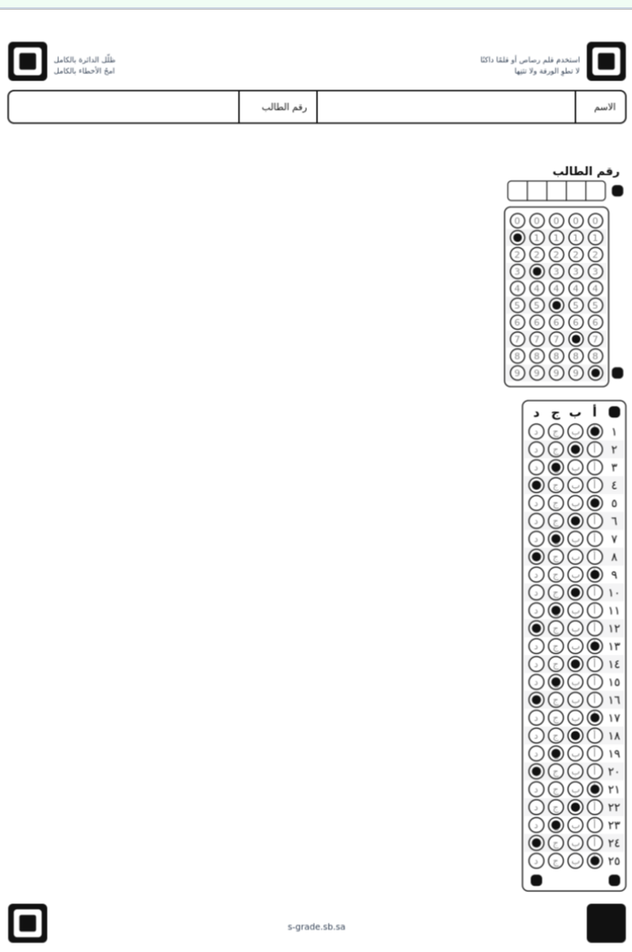
field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`20`	`20`	✓

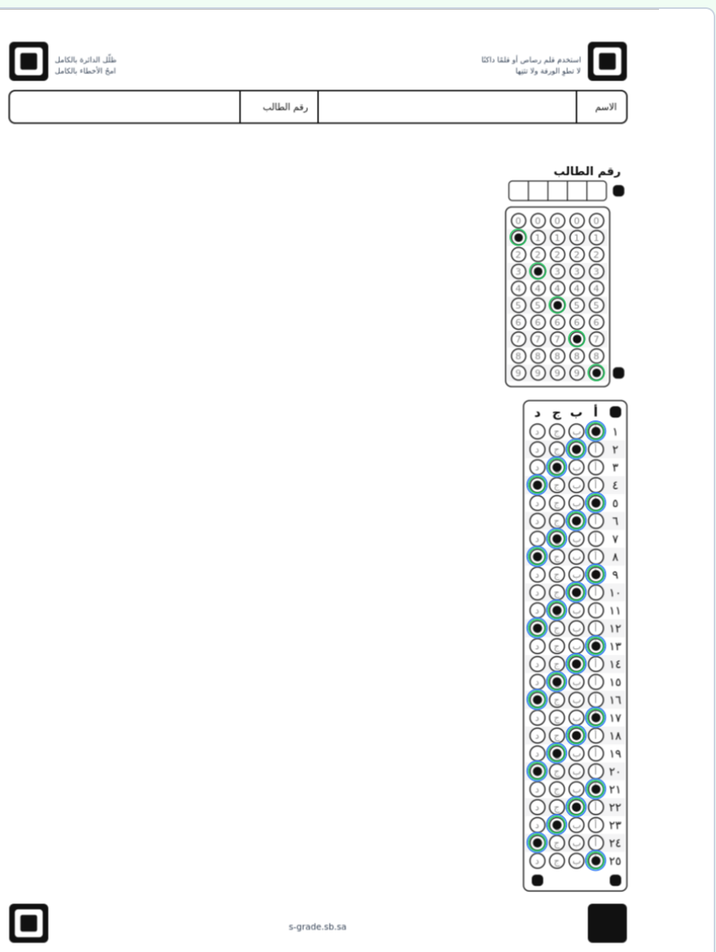
result.json

[AR] 25q · no section AND no Key zones PASS

profile: `pristine` · 305 passed · 0 failed







INPUT WARPED OVERLAY

field	expected	actual	
studentId	`13579`	`13579`	✓
form	`A`	`A`	✓
score	`25`	`25`	✓

result.json

[AR] 30q · no Key + mild perspective PASS

profile: `perspective_mild` · 386 passed · 0 failed

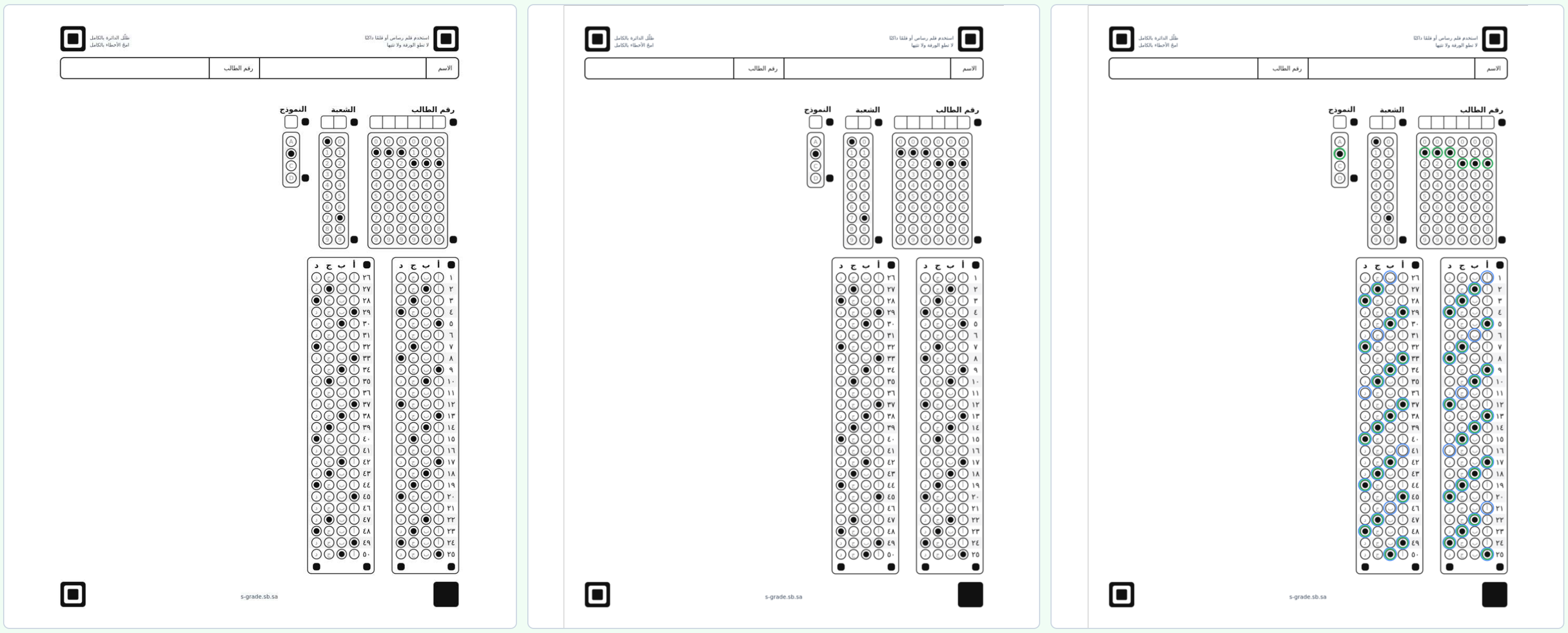
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`24680`	`24680`	✓
form	`A`	`A`	✓
section	`13`	`13`	✓
score	`30`	`30`	✓

result.json

[AR] 50q · 10 blank questions PASS

profile: `pristine` · 574 passed · 0 failed



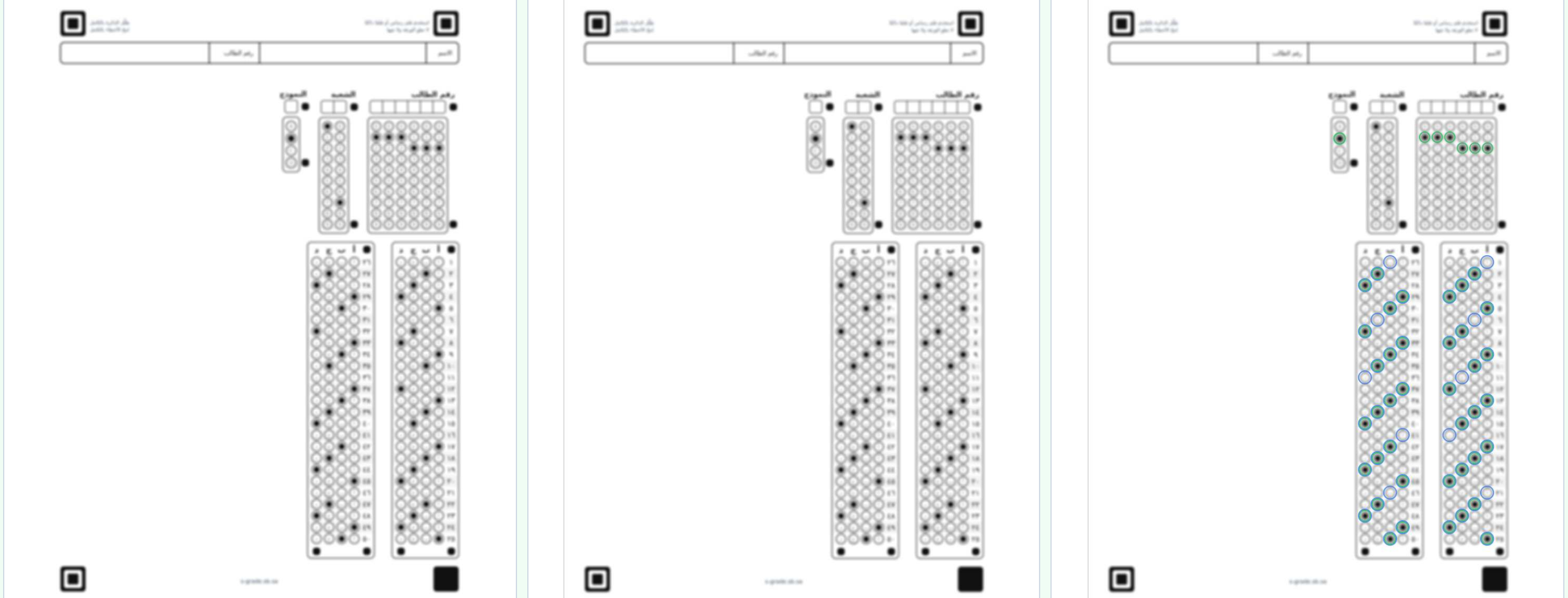
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

result.json

[AR] 50q · 10 blank questions + out of focus PASS

profile: `out_of_focus` · 574 passed · 0 failed



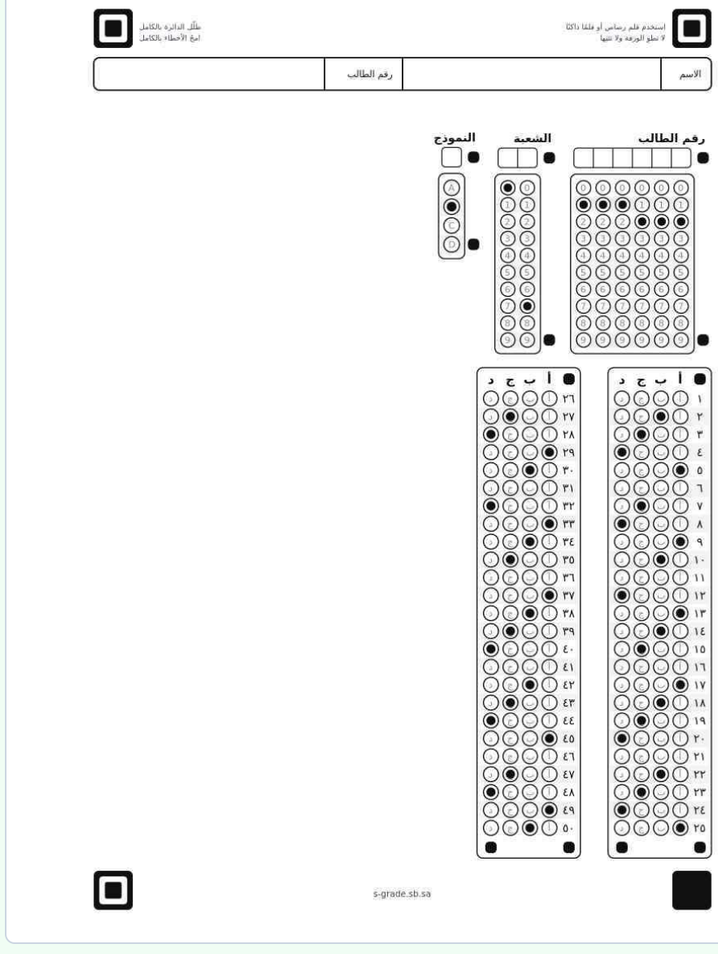
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

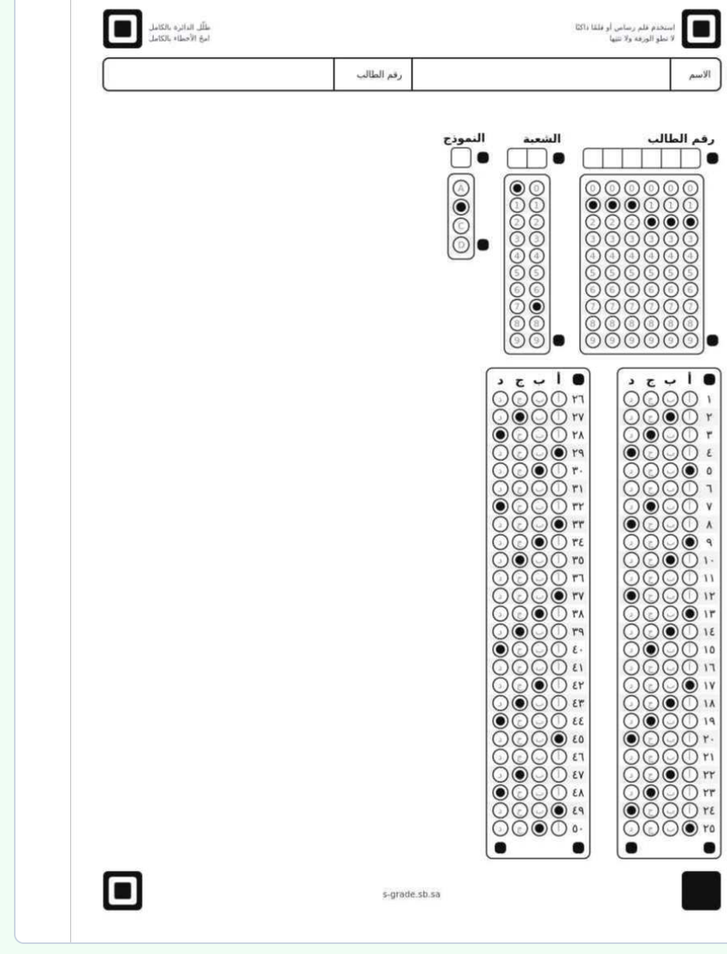
result.json

[AR] 50q · 10 blank questions + jpeg q30 PASS

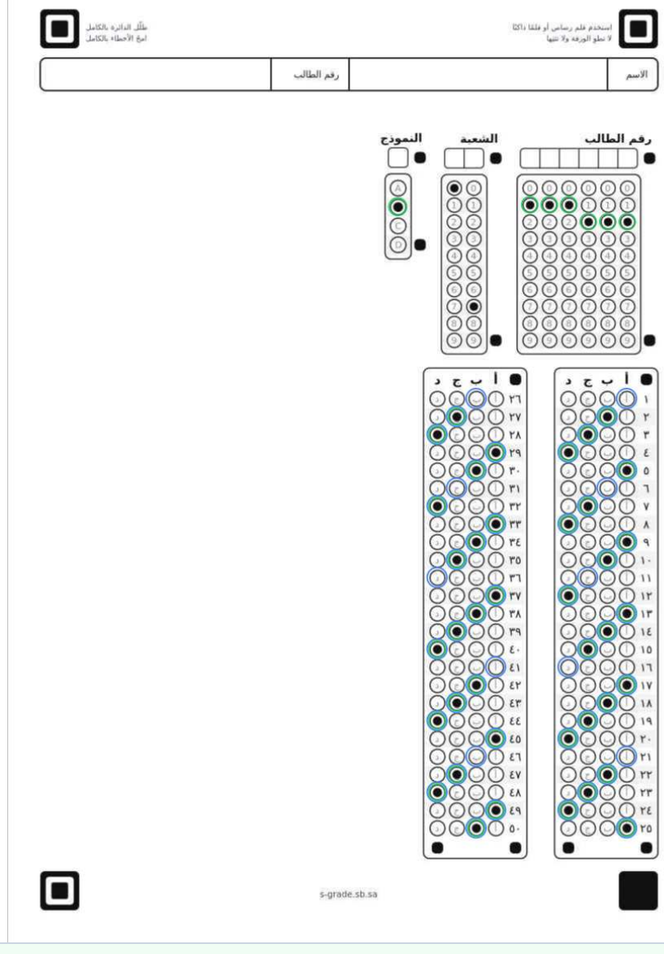
profile: `jpeg_q30` · 574 passed · 0 failed



INPUT



WARPED



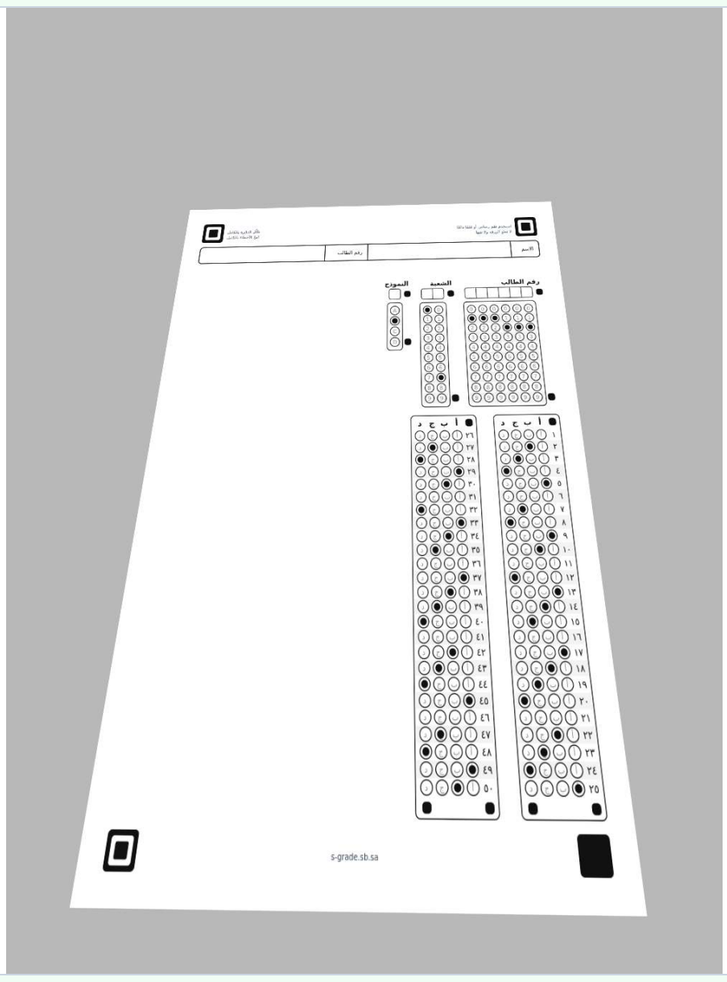
OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

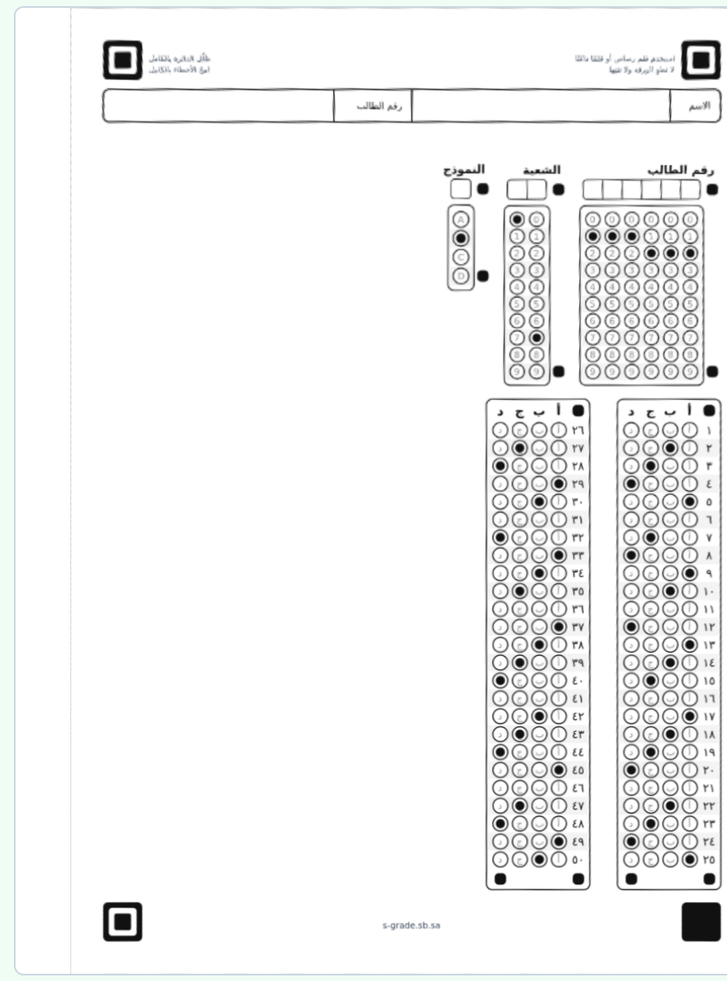
result.json

[AR] 50q · 10 blank questions + steep keystone PASS

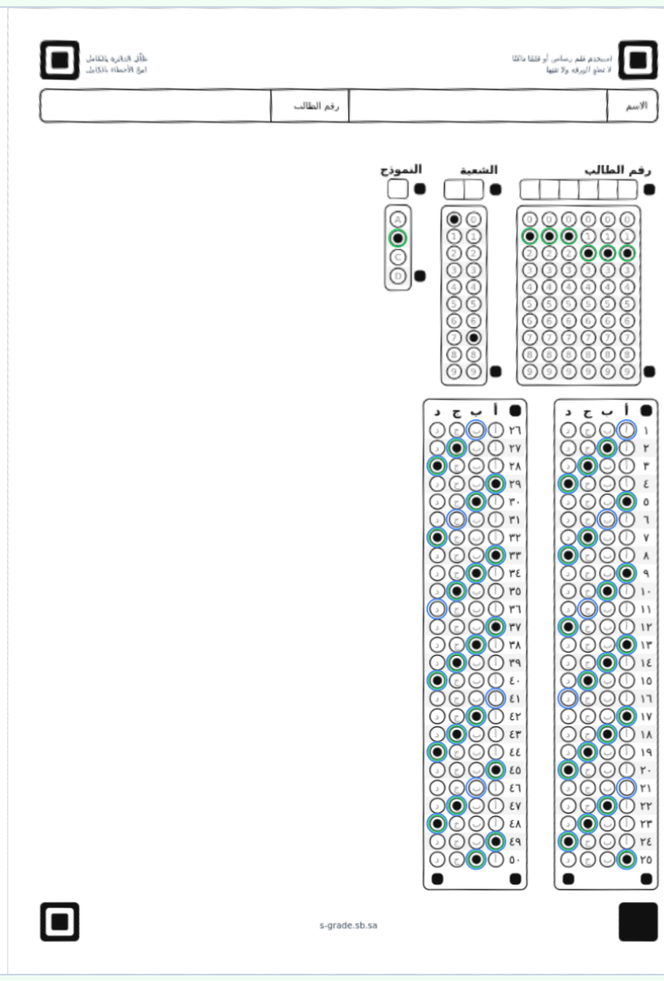
profile: `perspective_steep` · 574 passed · 0 failed



INPUT



WARPED



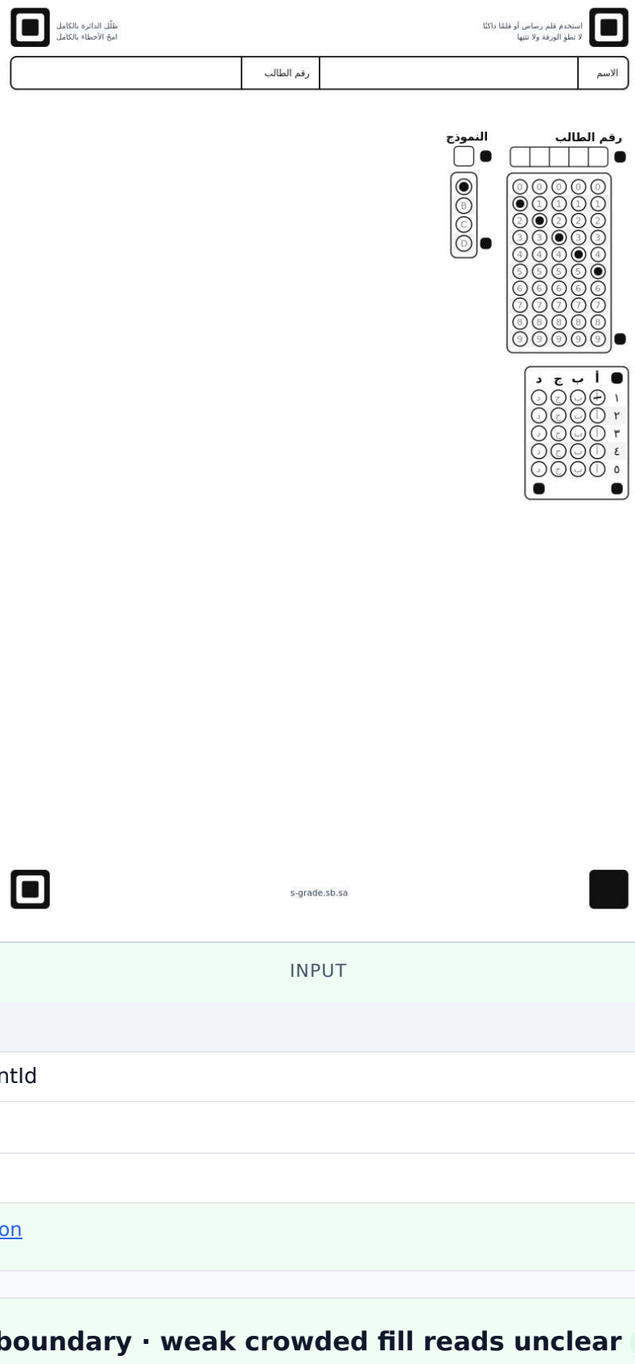
OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

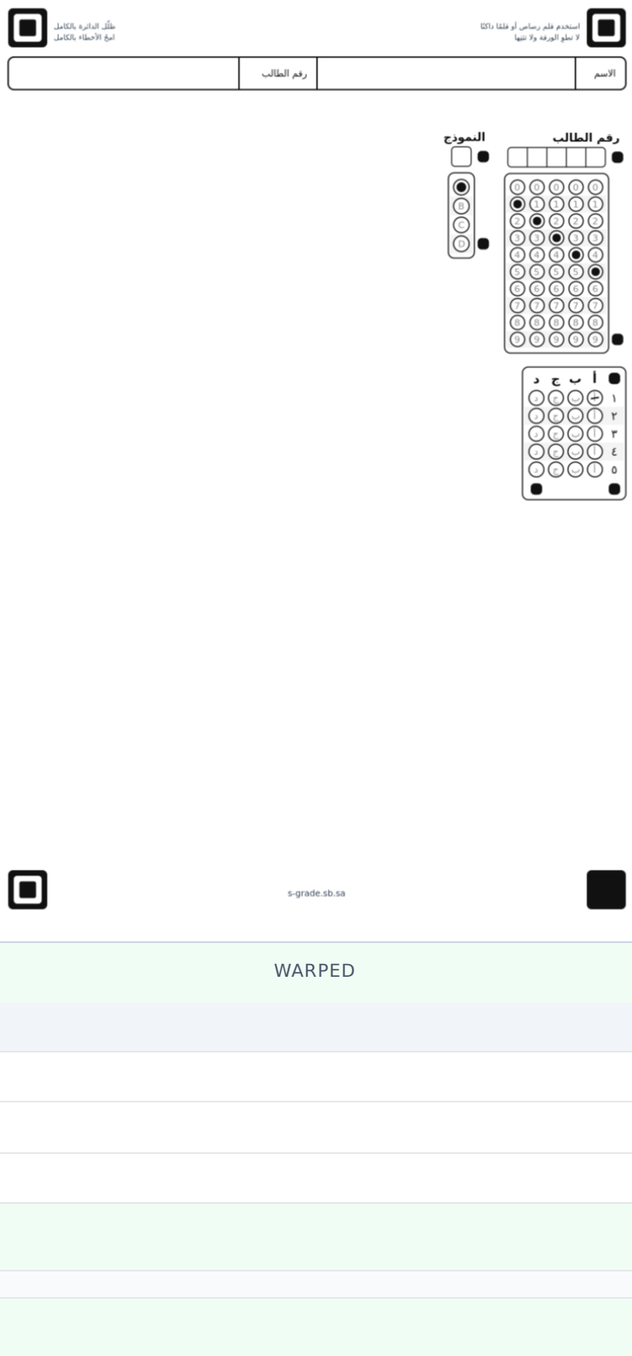
result.json

[AR] boundary · too-small stroke below 0.47 reads blank PASS

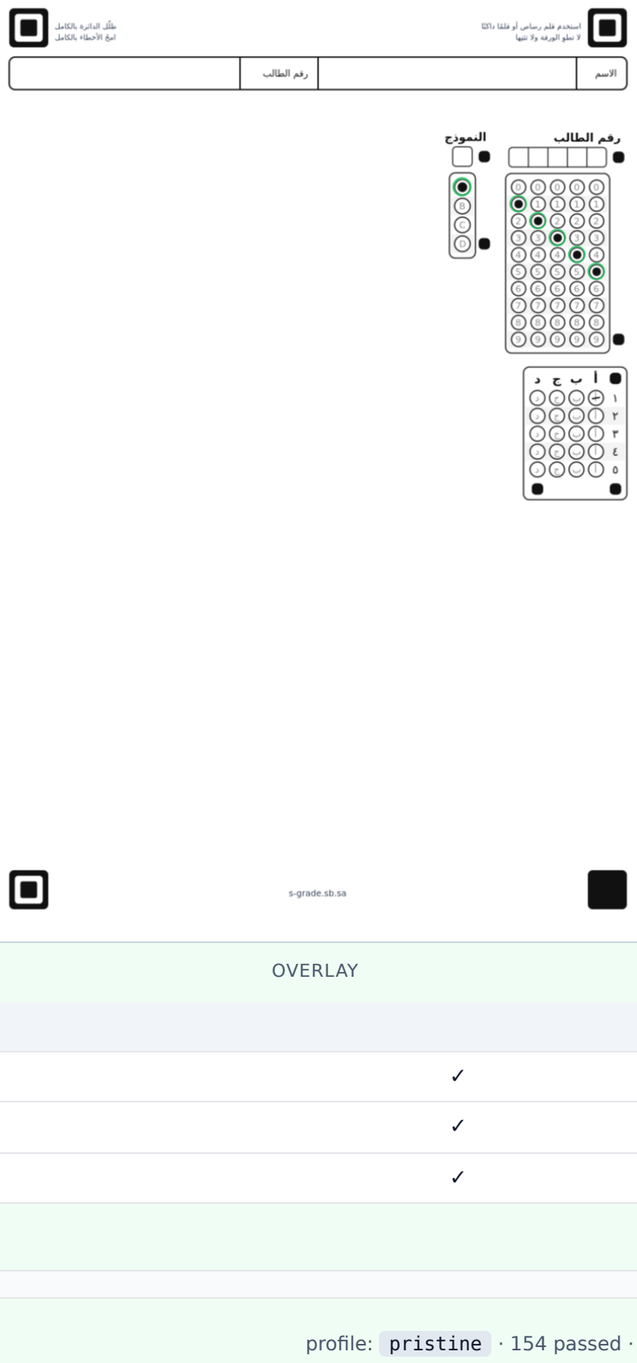
profile: `pristine` · 154 passed · 0 failed



INPUT



WARPED



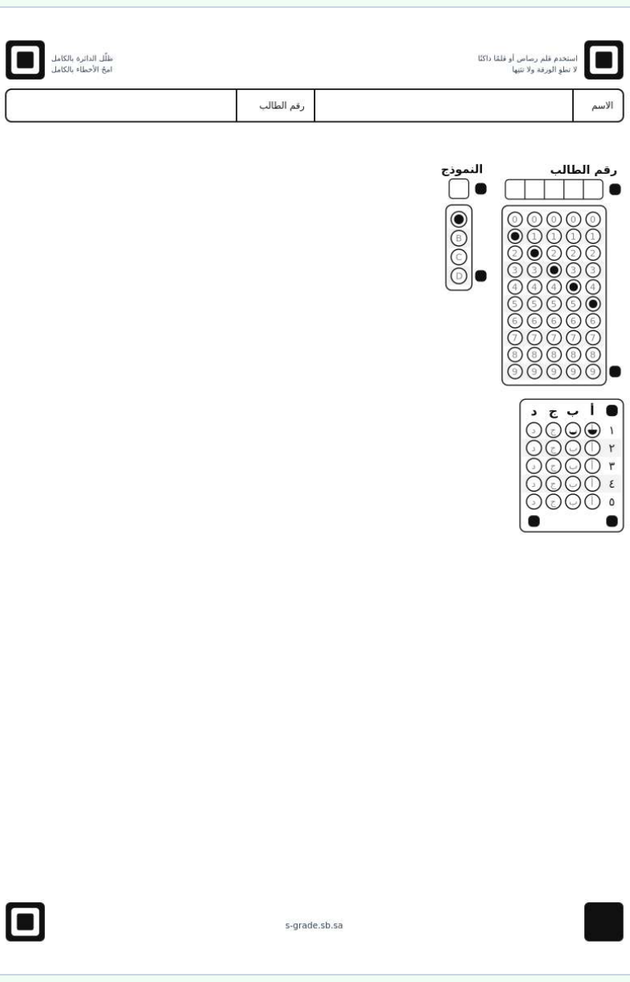
OVERLAY

field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`0`	`0`	✓

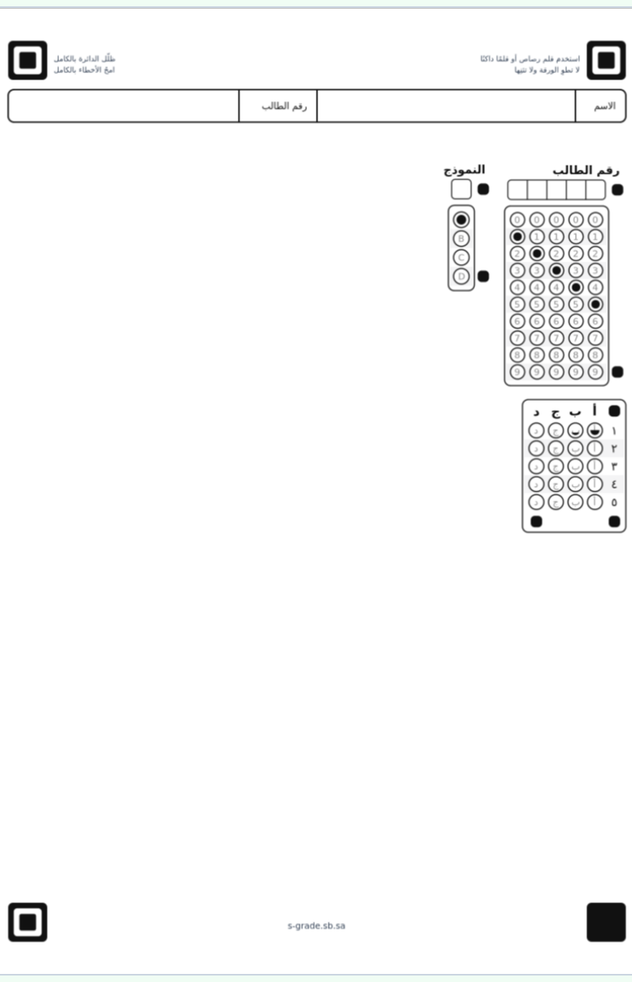
result.json

[AR] boundary · weak crowded fill reads unclear PASS

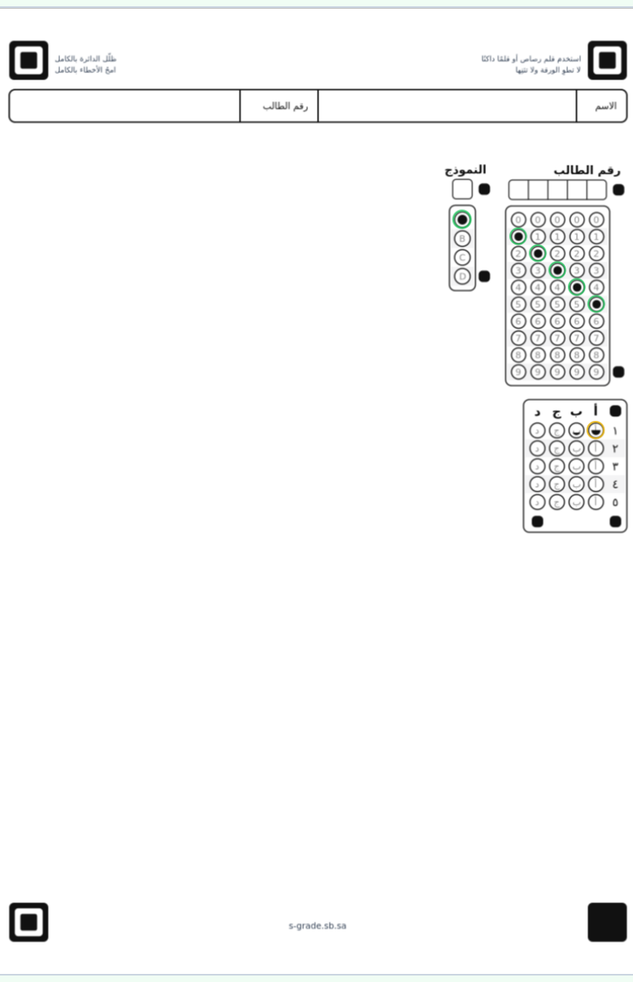
profile: `pristine` · 154 passed · 0 failed



INPUT



WARPED



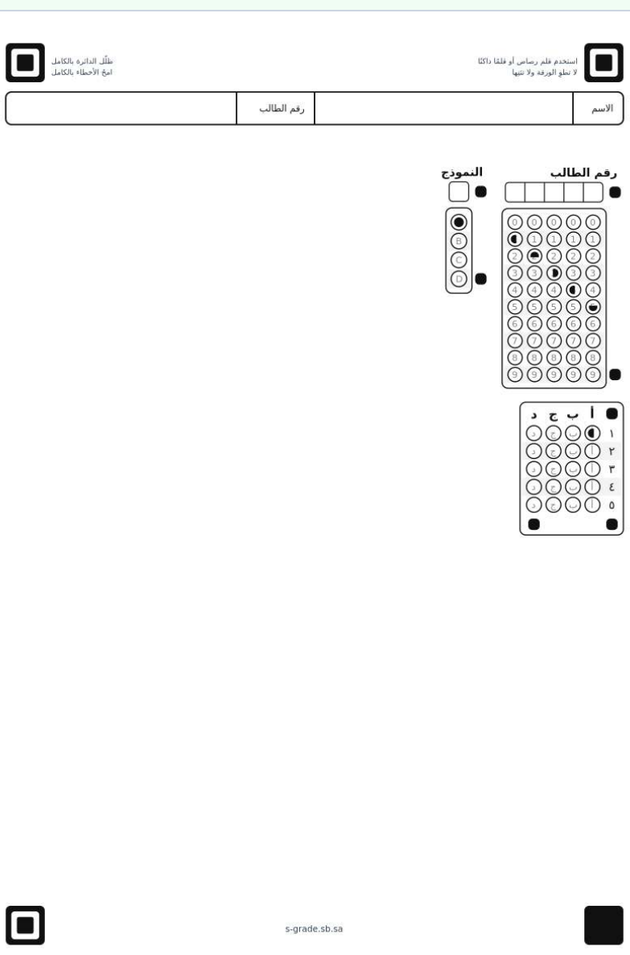
OVERLAY

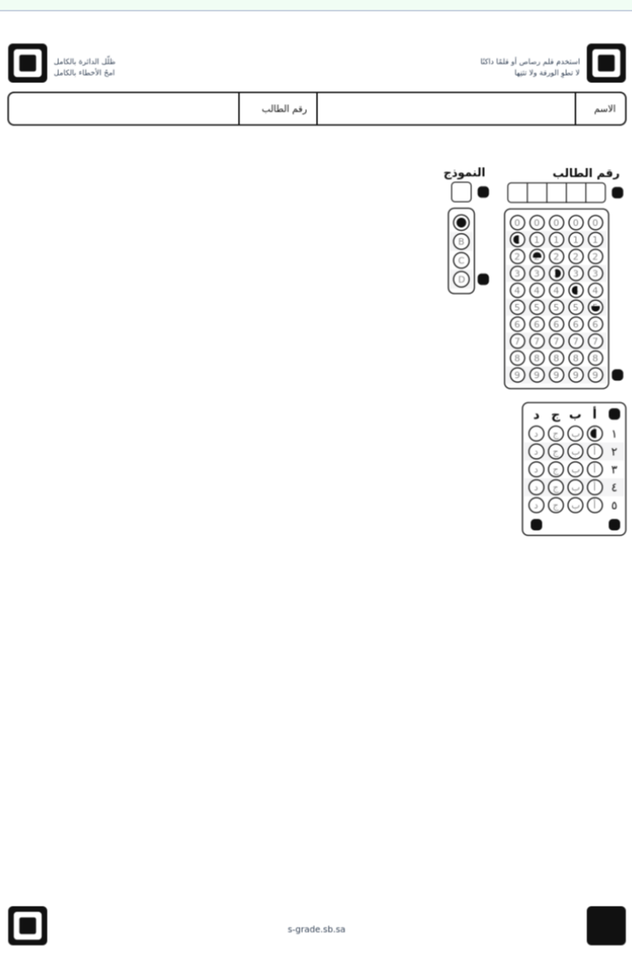
field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`0`	`0`	✓

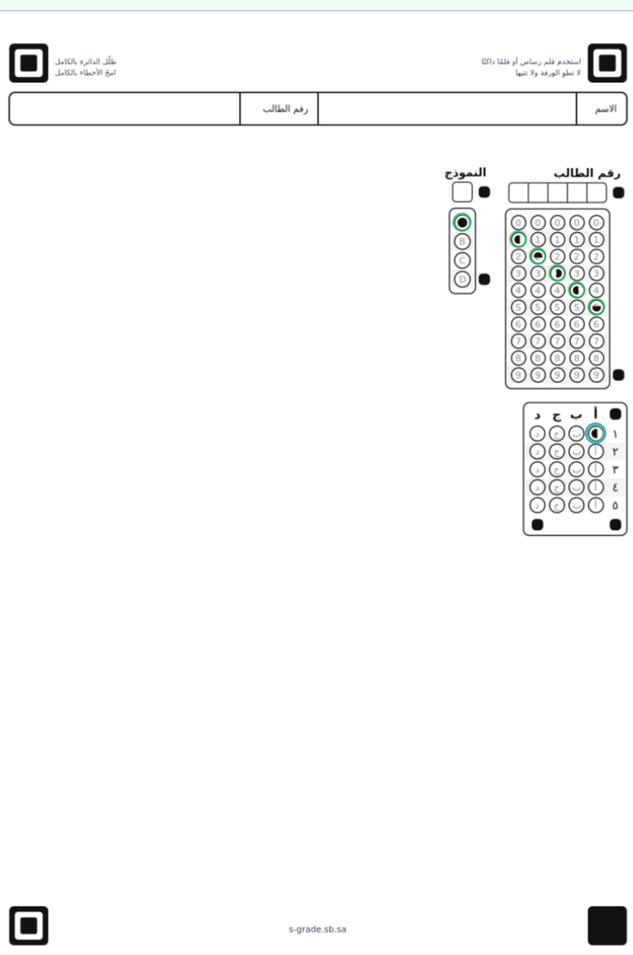
result.json

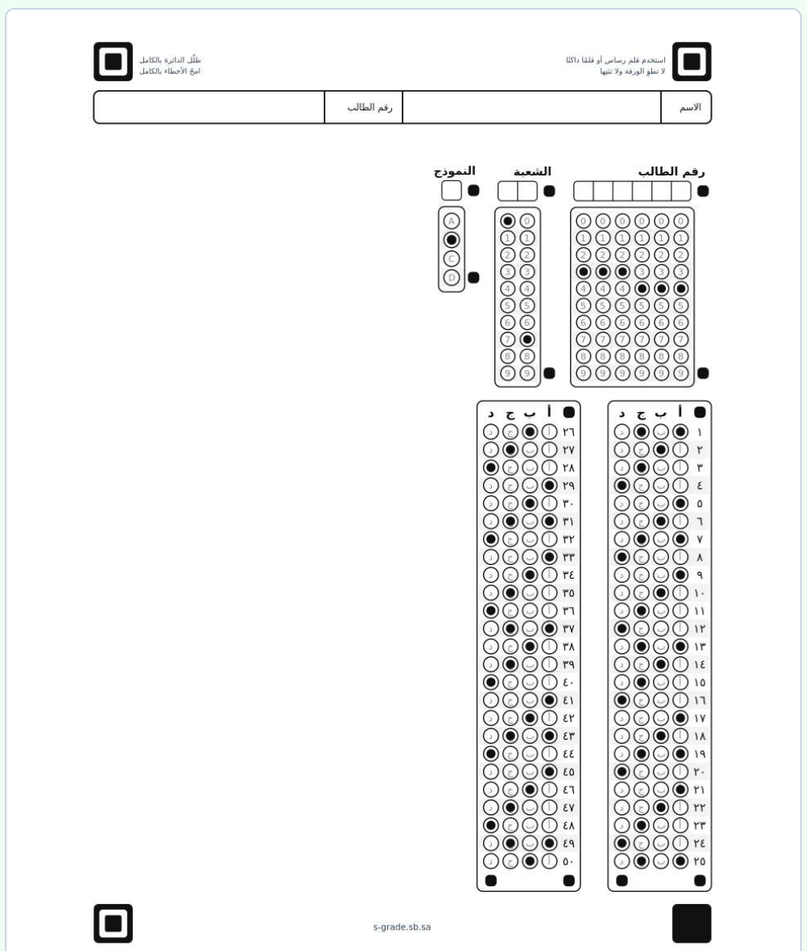
[AR] boundary · strong enough fill reads selected PASS

profile: `pristine` · 154 passed · 0 failed

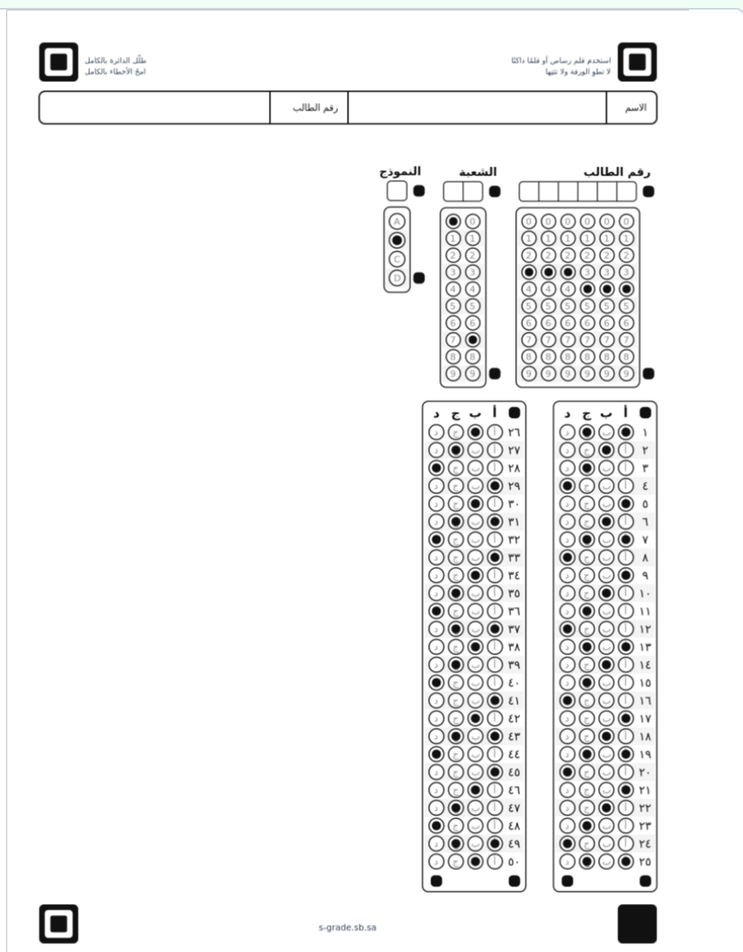




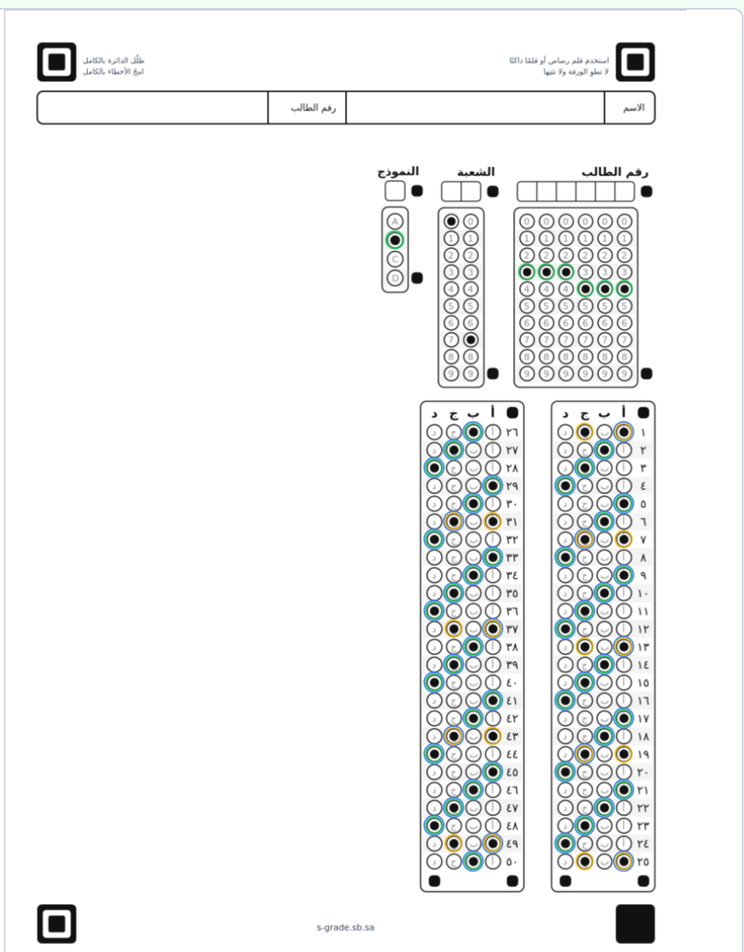




INPUT



WARPED



OVERLAY

field	expected	actual	
studentId	`12345`	`12345`	✓
form	`A`	`A`	✓
score	`1`	`1`	✓

result.json

[AR] 50q · multi-marked questions PASS

profile: `pristine` · 574 passed · 0 failed

INPUT

WARPED

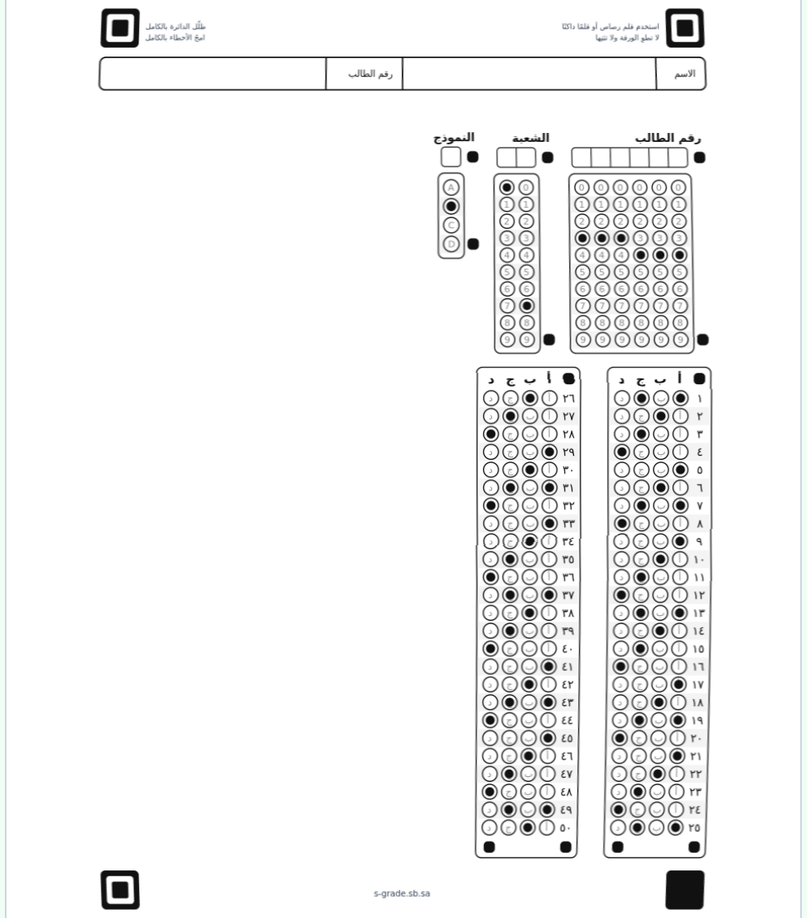
OVERLAY

field	expected	actual	
studentId	`333444`	`333444`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`41`	`41`	✓

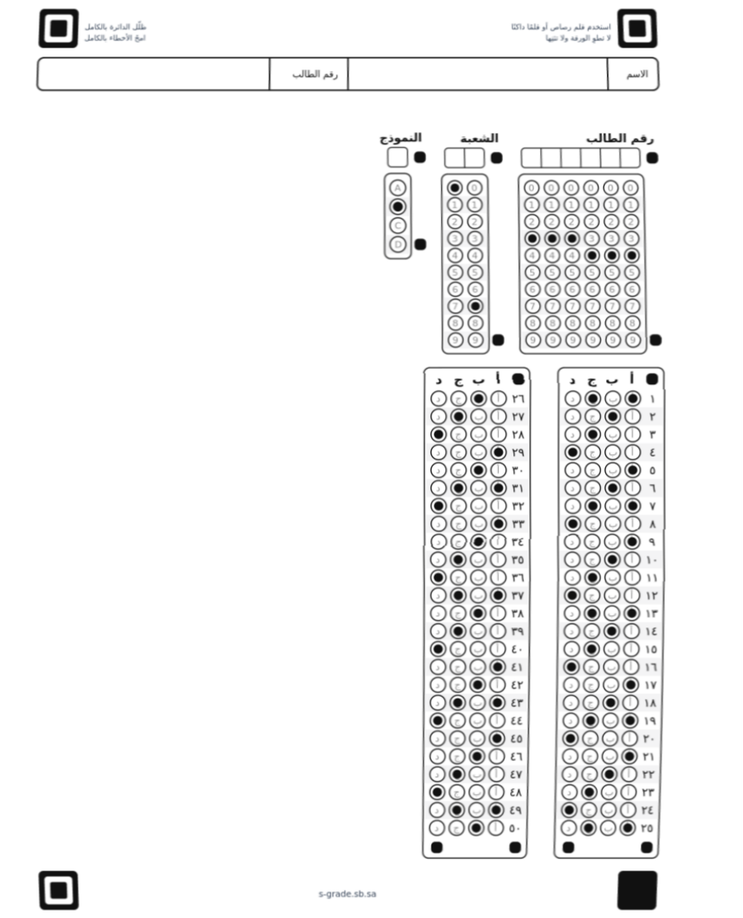
result.json

[AR] 50q · multi-marked + curled page MILD PASS

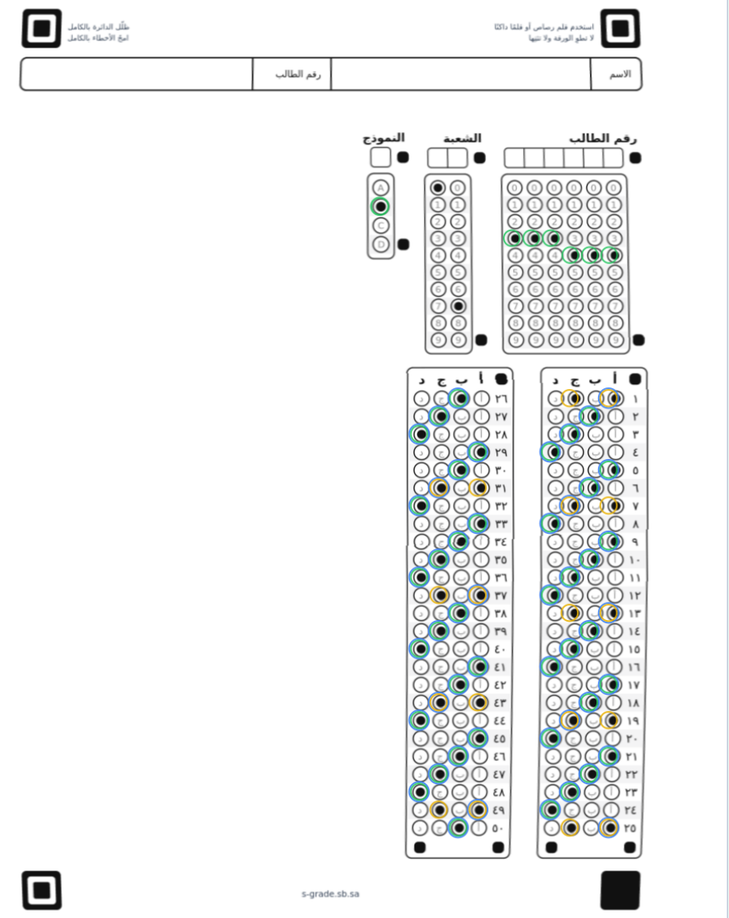
profile: `curled_page_mild` · 574 passed · 0 failed



INPUT



WARPED



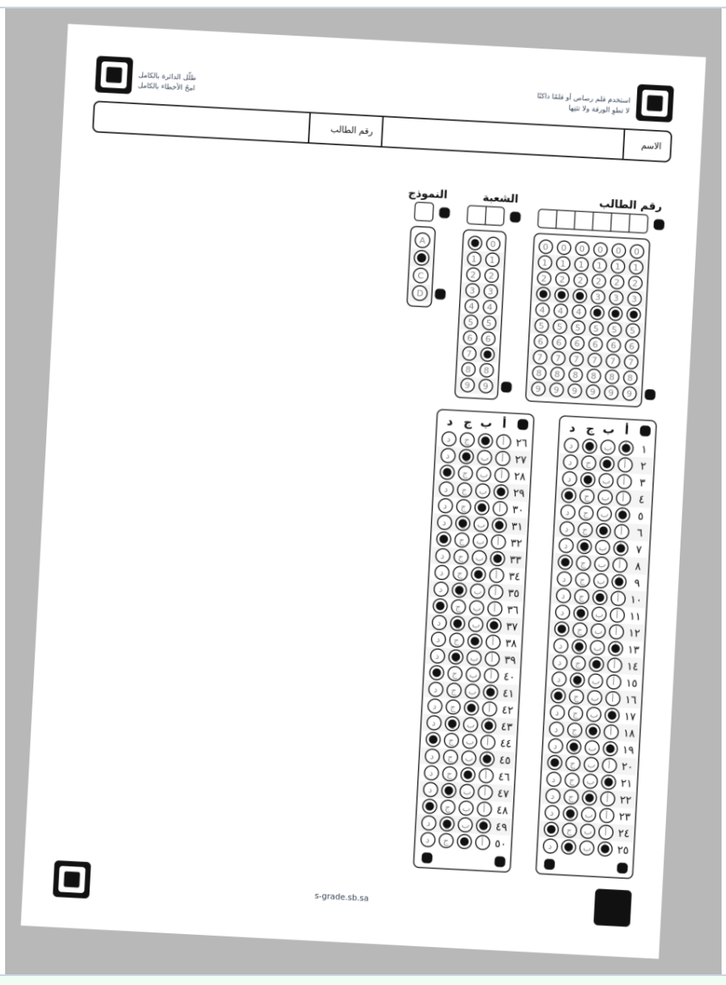
OVERLAY

field	expected	actual	
studentId	`333444`	`333444`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`41`	`41`	✓

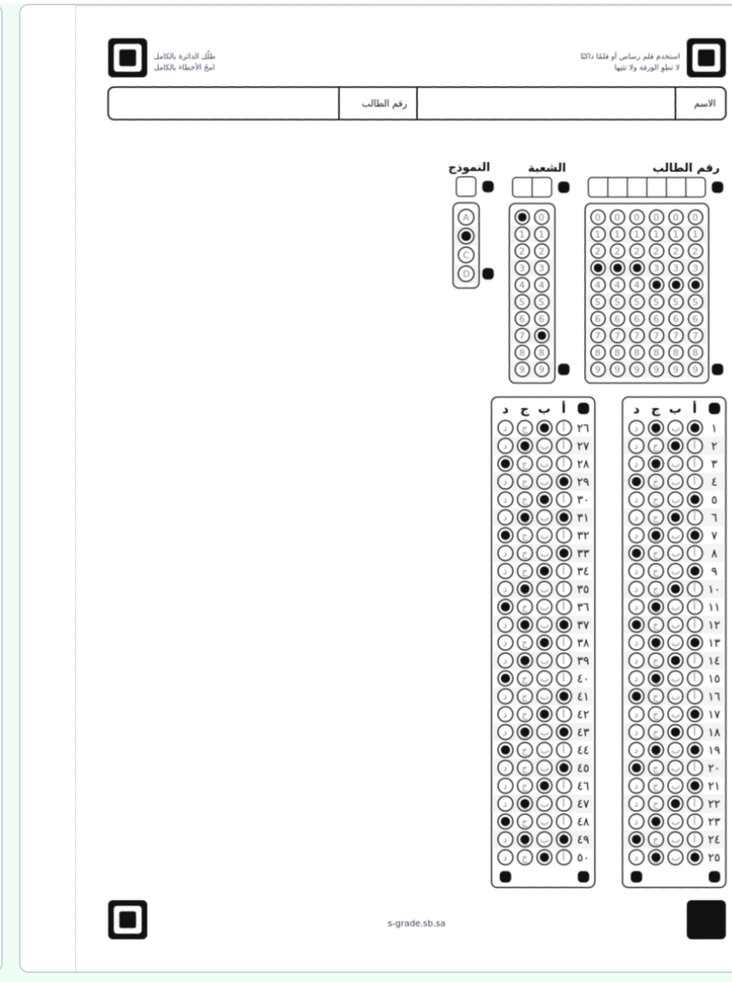
result.json

[AR] 50q · multi-marked + rotated 3° PASS

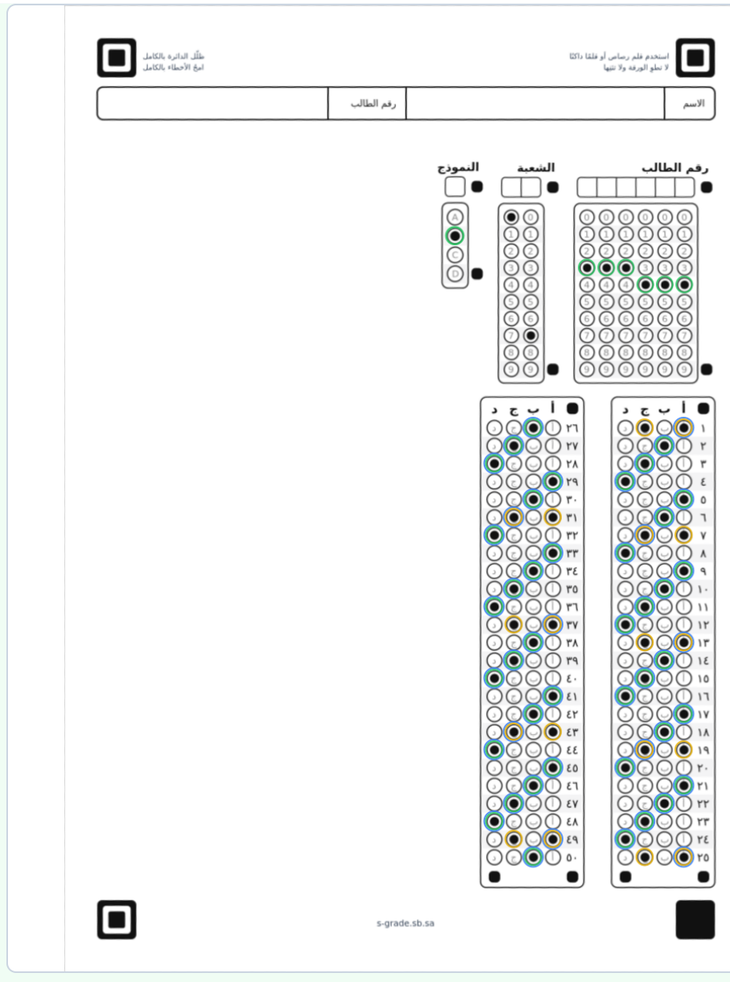
profile: `rotated_3deg` · 574 passed · 0 failed



INPUT



WARPED



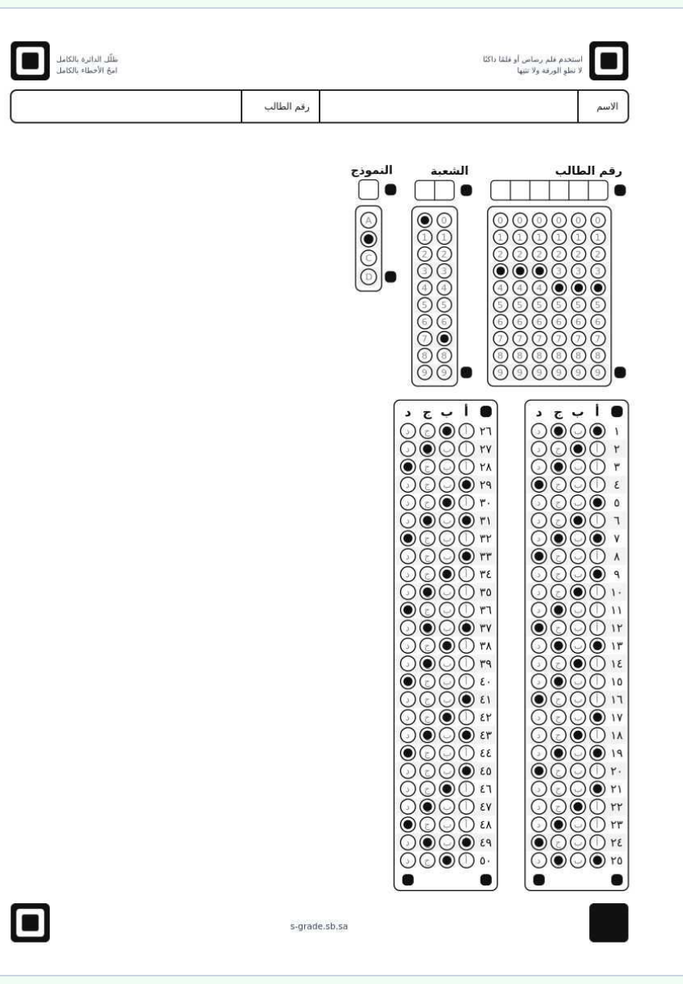
OVERLAY

field	expected	actual	
studentId	`333444`	`333444`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`41`	`41`	✓

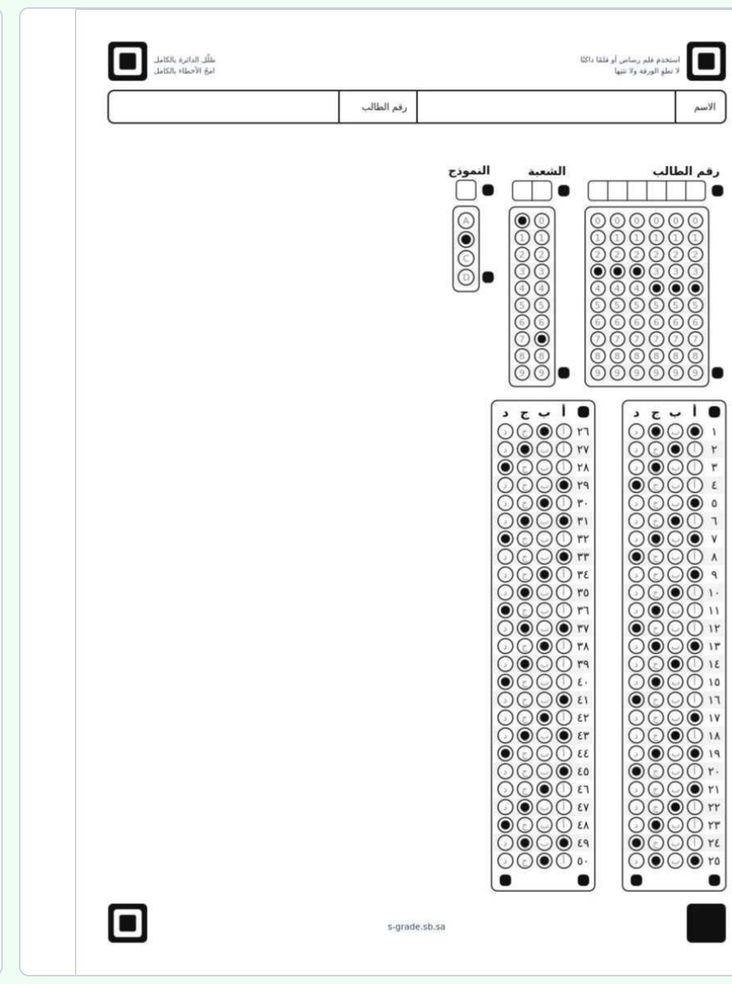
result.json

[AR] 50q · multi-marked + jpeg q50 PASS

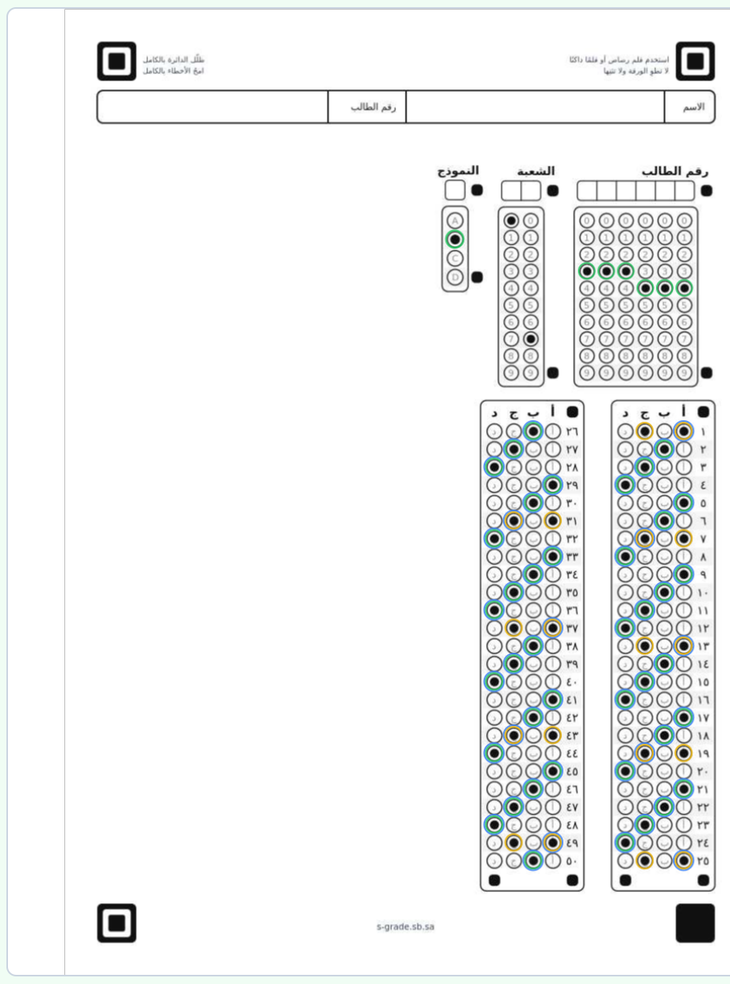
profile: `jpeg_q50` · 574 passed · 0 failed



INPUT



WARPED



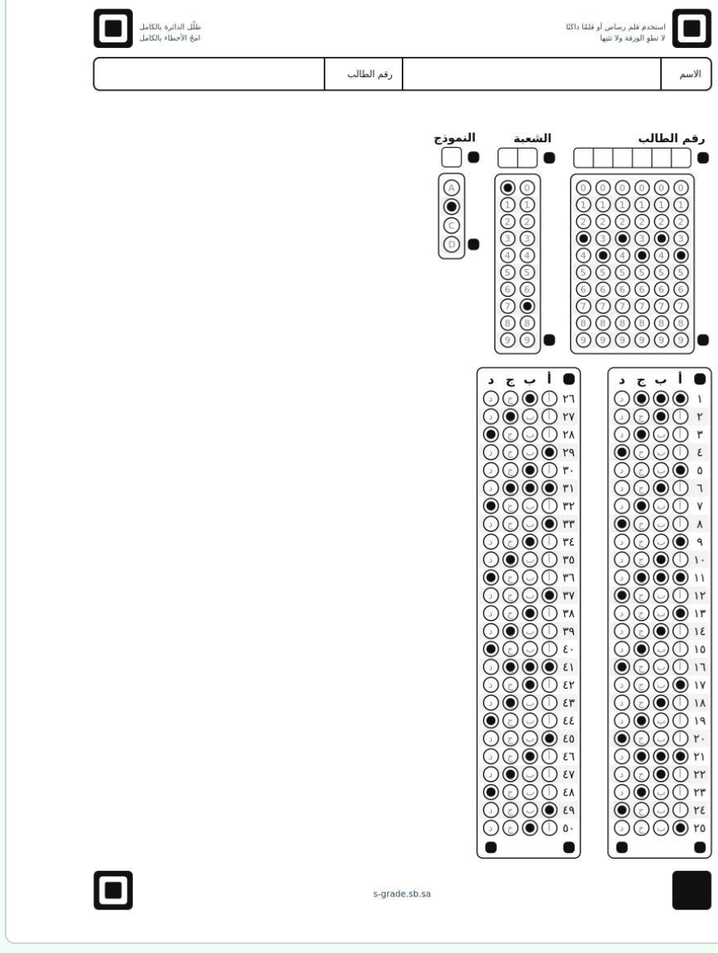
OVERLAY

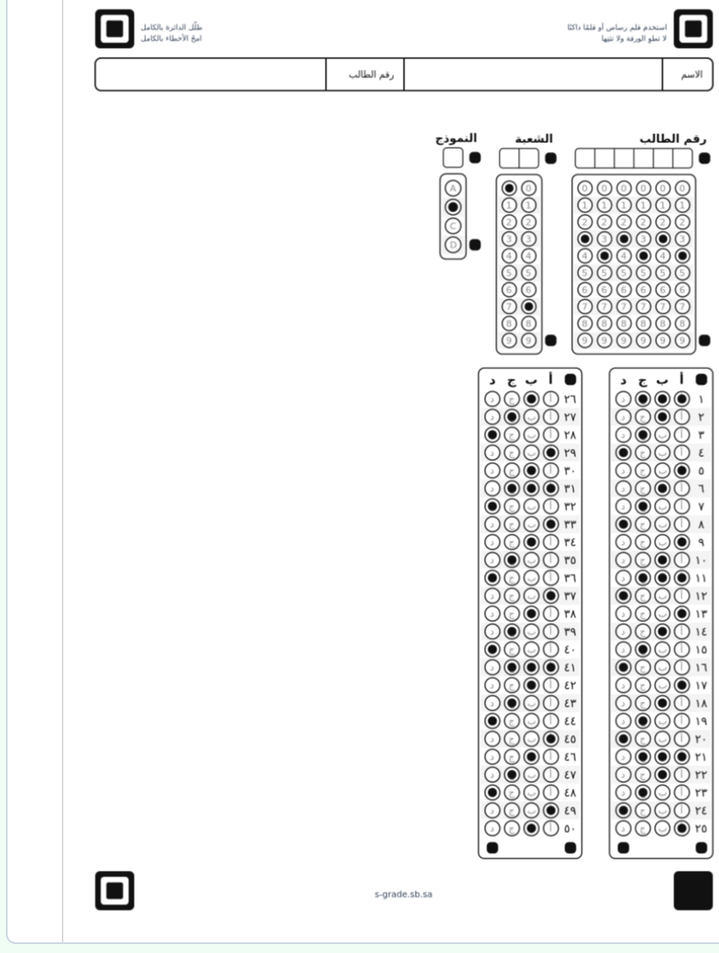
field	expected	actual	
studentId	`333444`	`333444`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`41`	`41`	✓

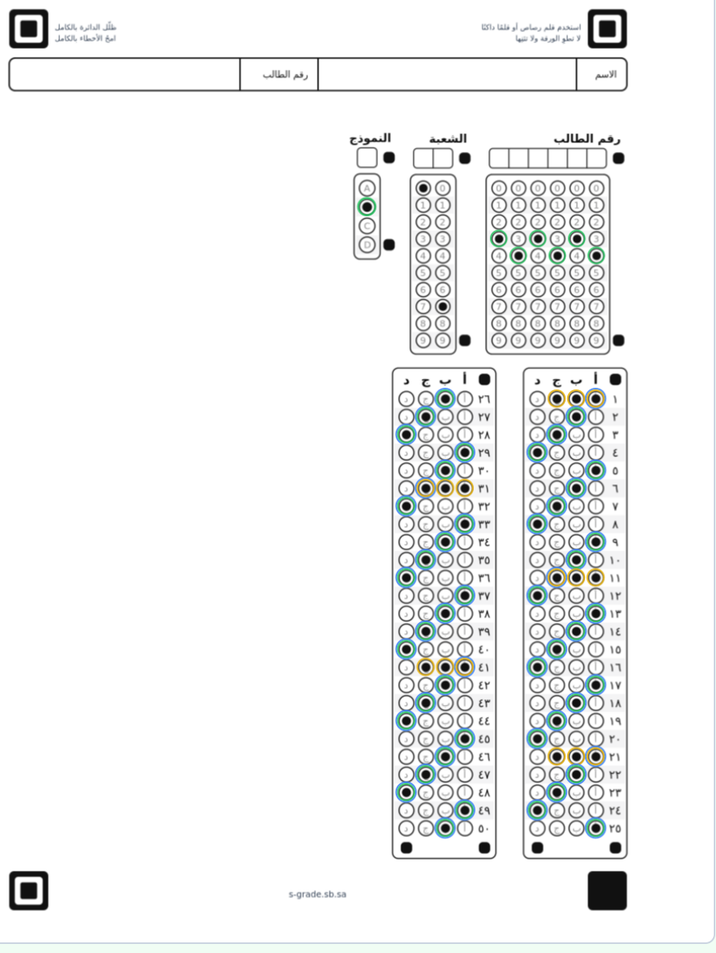
result.json

[AR] 50q · triple-marked questions PASS

profile: `pristine` · 574 passed · 0 failed







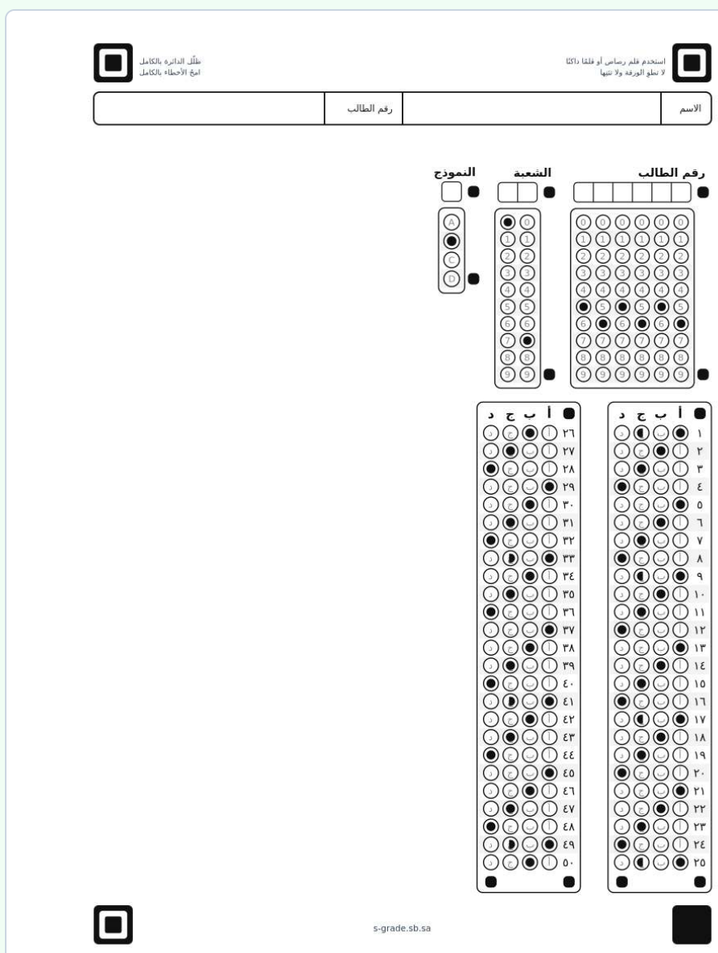
INPUT WARPED OVERLAY

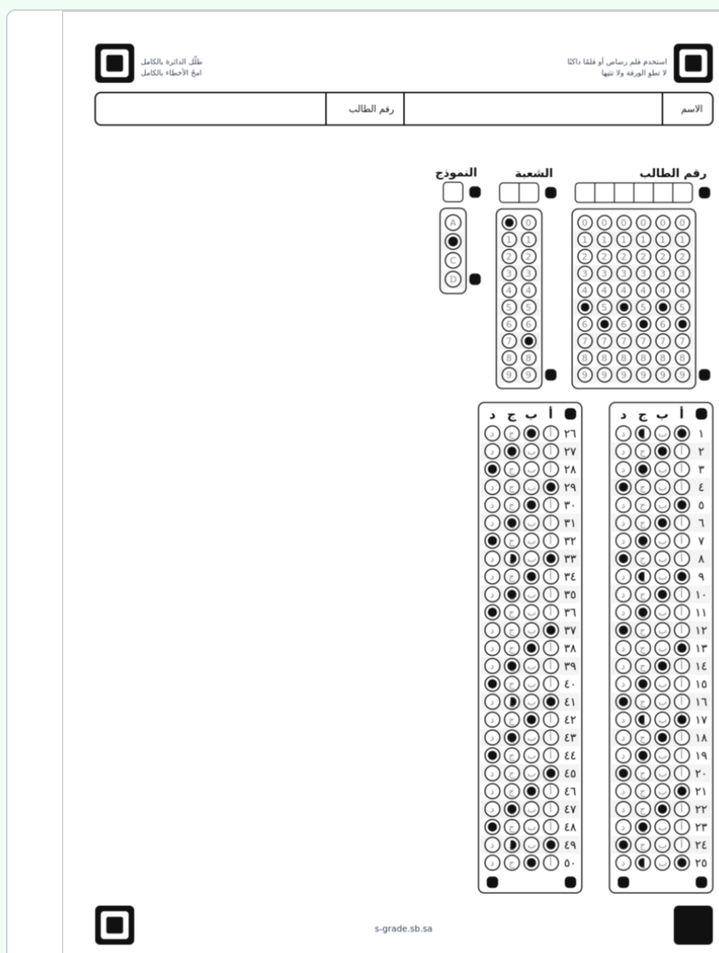
field	expected	actual	
studentId	`343434`	`343434`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`45`	`45`	✓

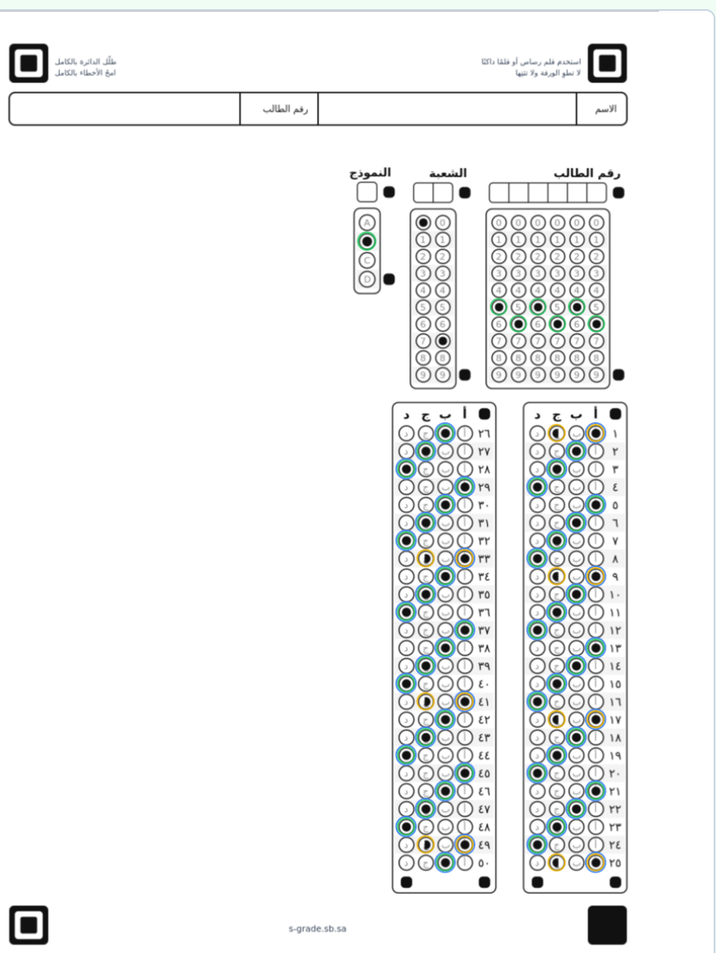
result.json

[AR] 50q · uneven multi-fill (partial second mark) PASS

profile: `pristine` · 574 passed · 0 failed







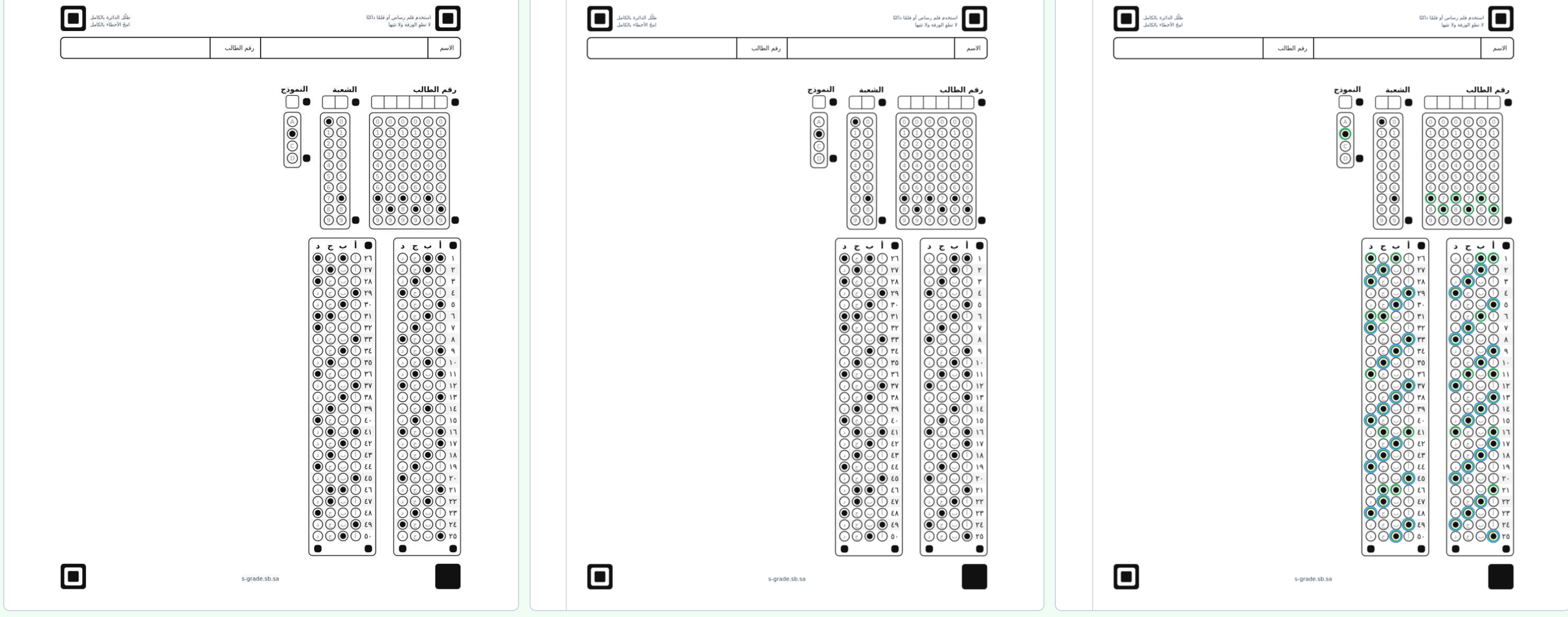
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`565656`	`565656`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`43`	`43`	✓

result.json

[AR] 50q · multi-answer key (OR mode) PASS

profile: `pristine` · 574 passed · 0 failed



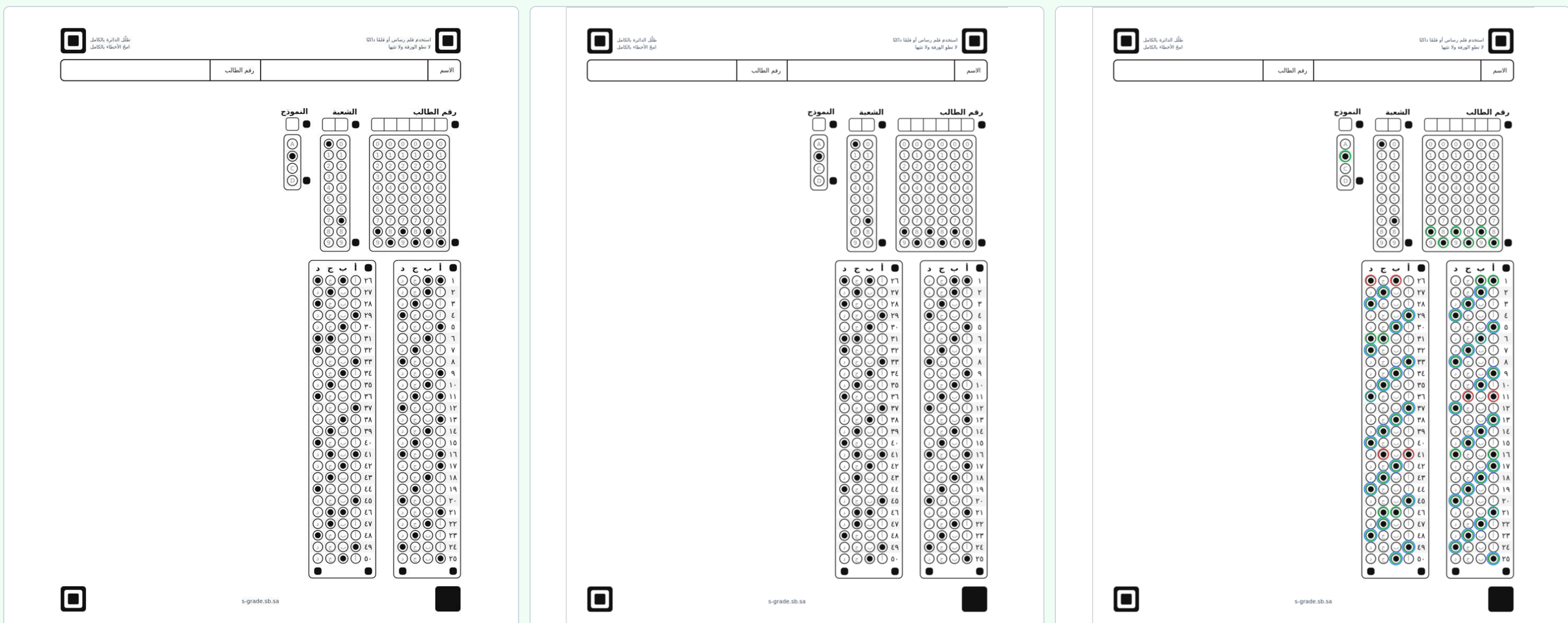
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`787878`	`787878`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · multi-answer key (AND mode) PASS

profile: `pristine` · 574 passed · 0 failed



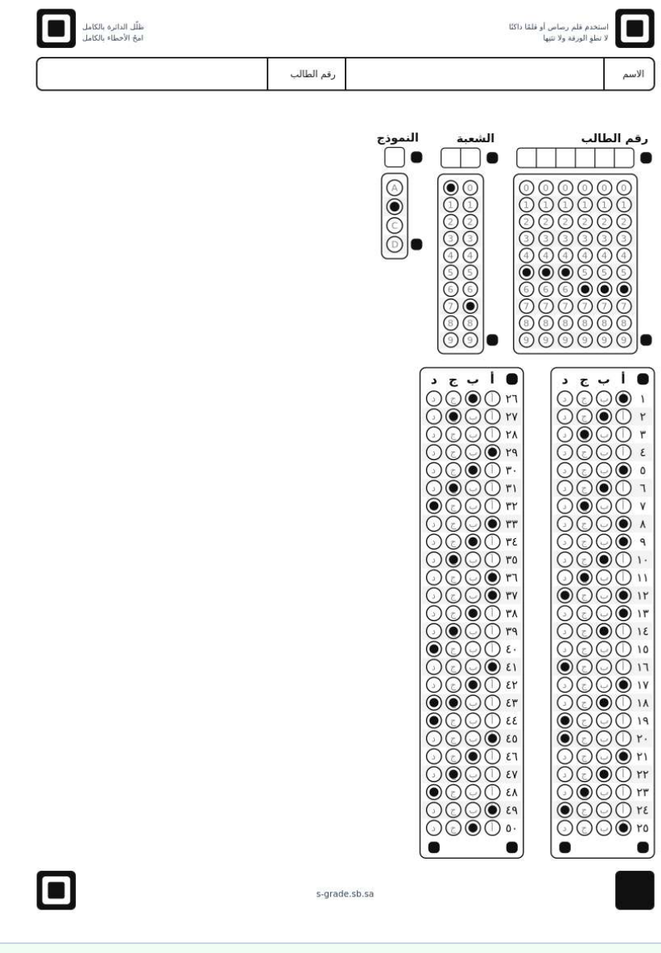
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`898989`	`898989`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`45.5`	`45.5`	✓

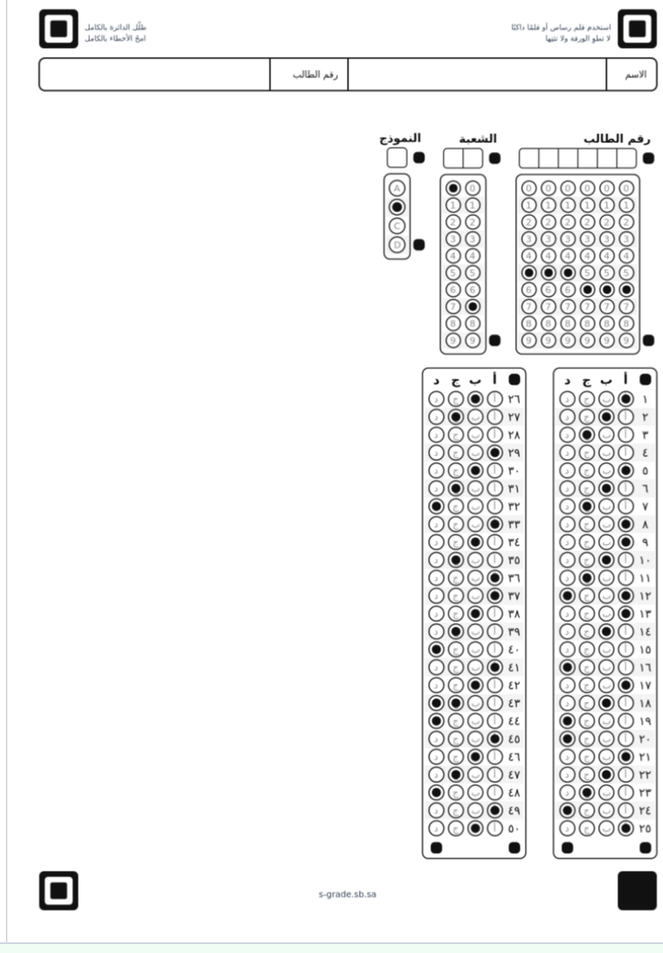
result.json

[AR] 50q · mixed (wrong + blank + multi) PASS

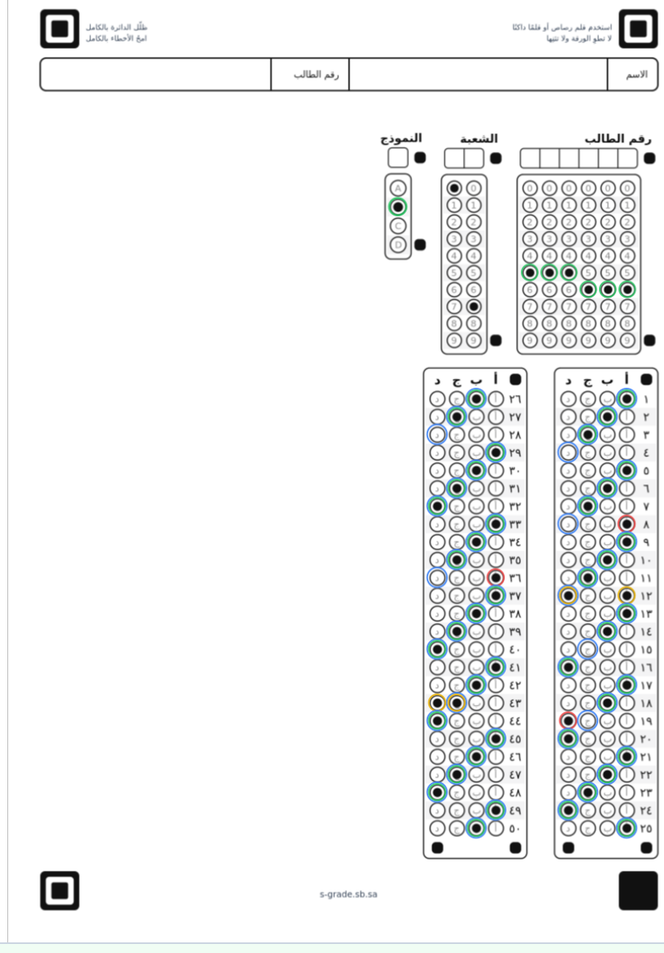
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



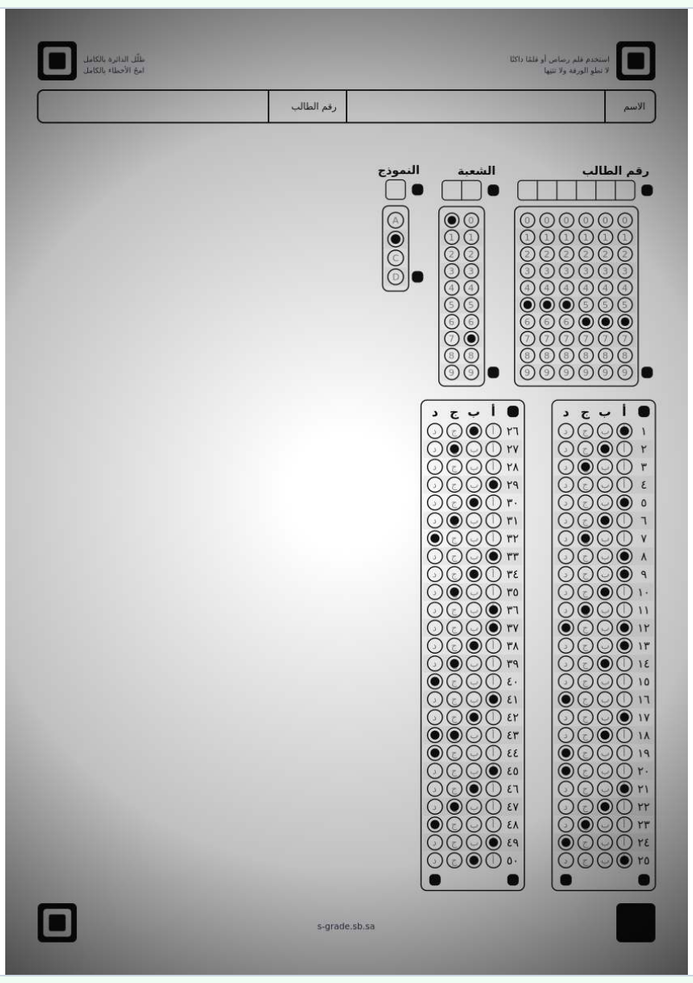
OVERLAY

field	expected	actual	
studentId	`555666`	`555666`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`42`	`42`	✓

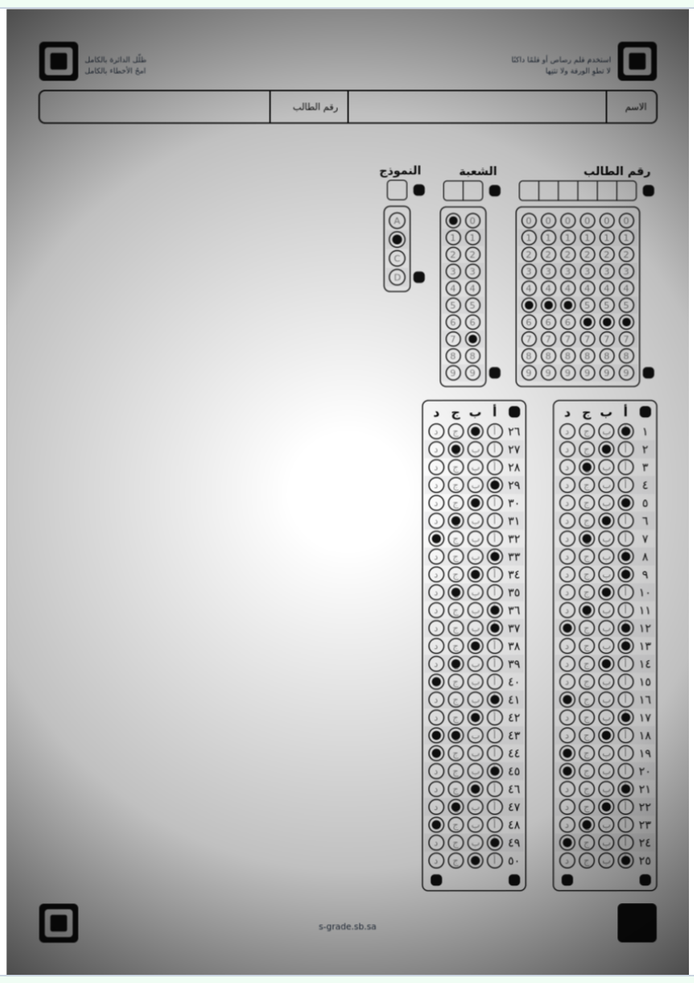
result.json

[AR] 50q · mixed + lighting vignette PASS

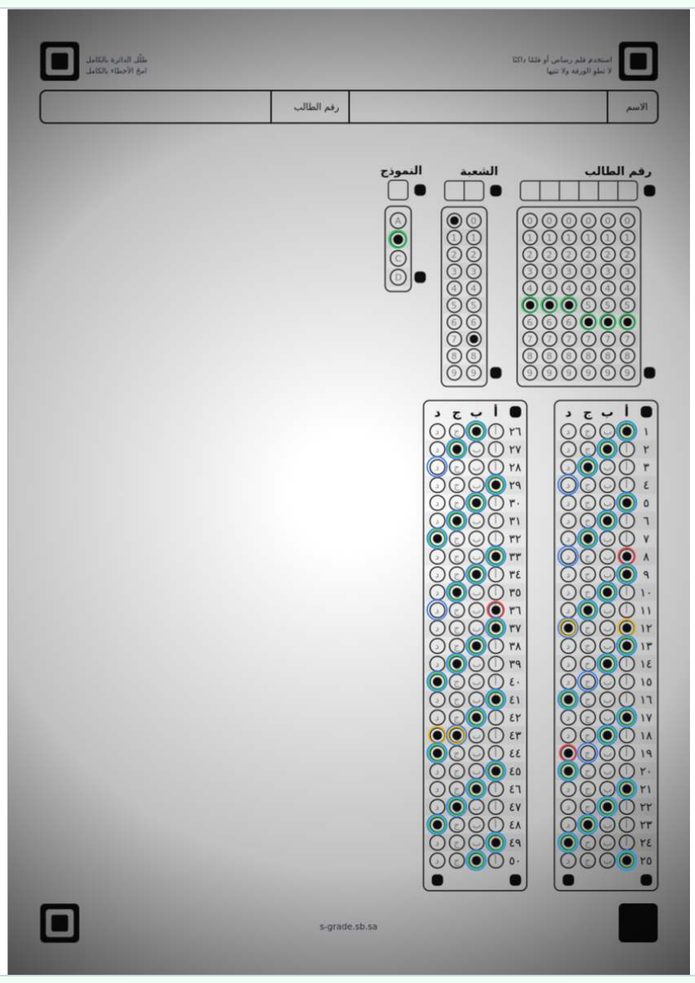
profile: `lighting_vignette` · 574 passed · 0 failed



INPUT



WARPED



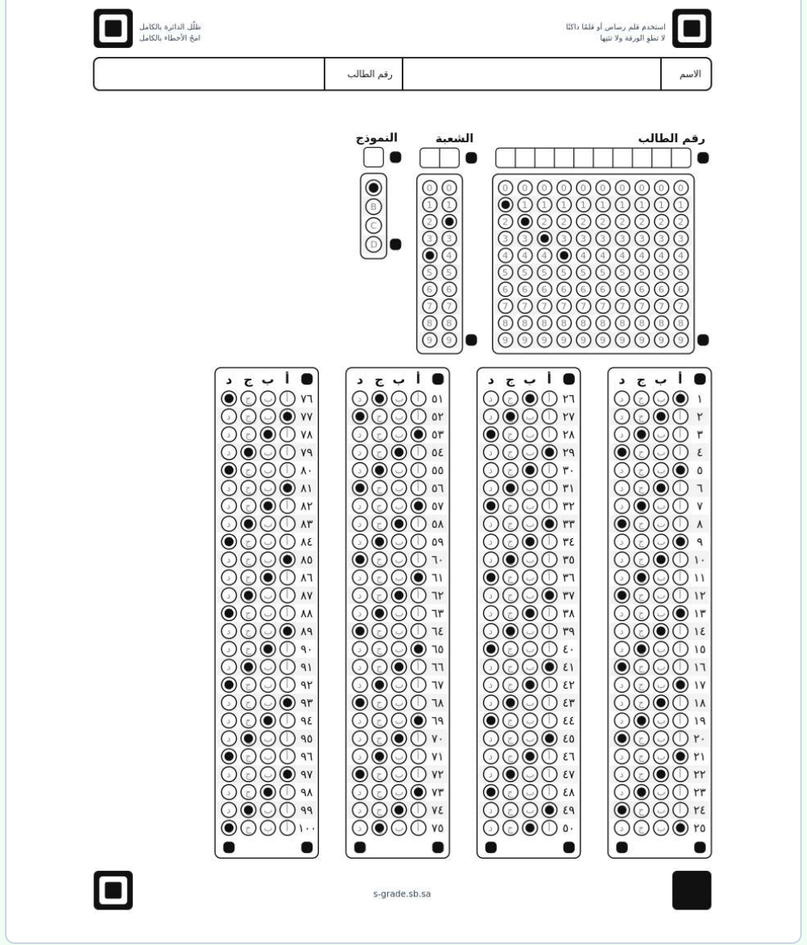
OVERLAY

field	expected	actual	
studentId	`555666`	`555666`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`42`	`42`	✓

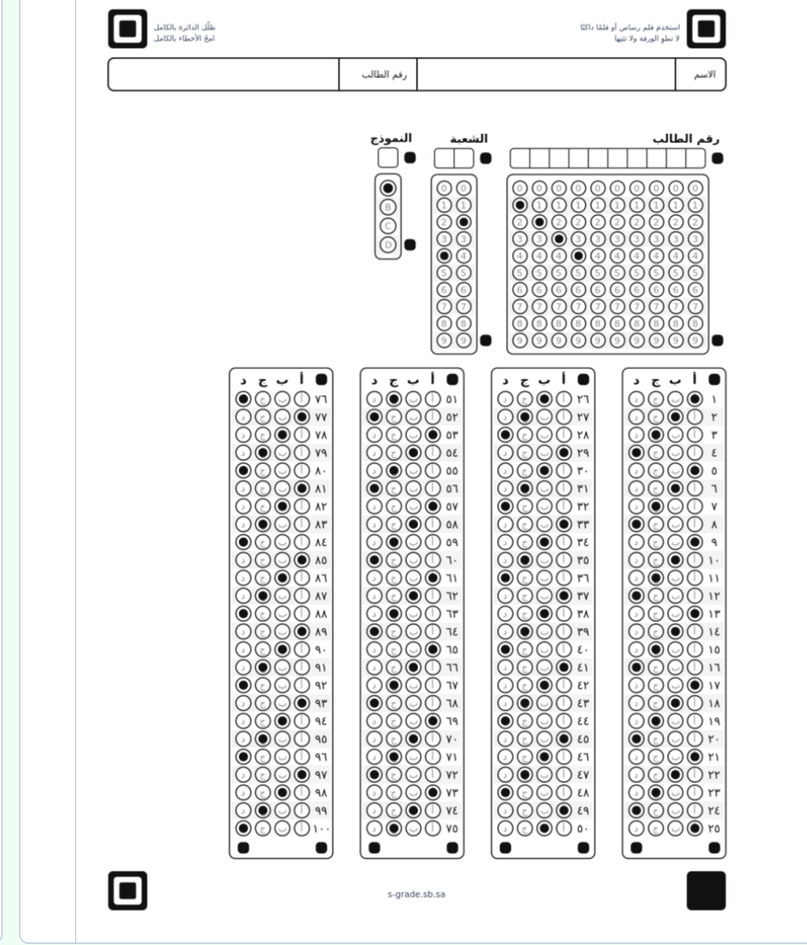
result.json

[AR] 100q · 10-id, first 4 digits only PASS

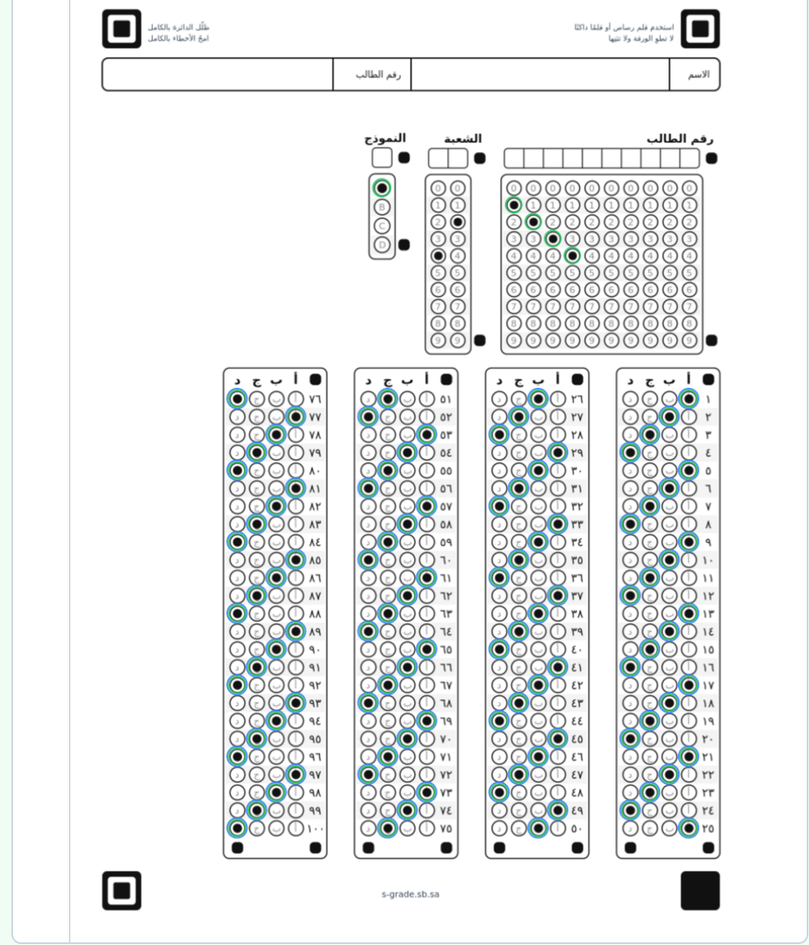
profile: `pristine` · 1054 passed · 0 failed



INPUT



WARPED



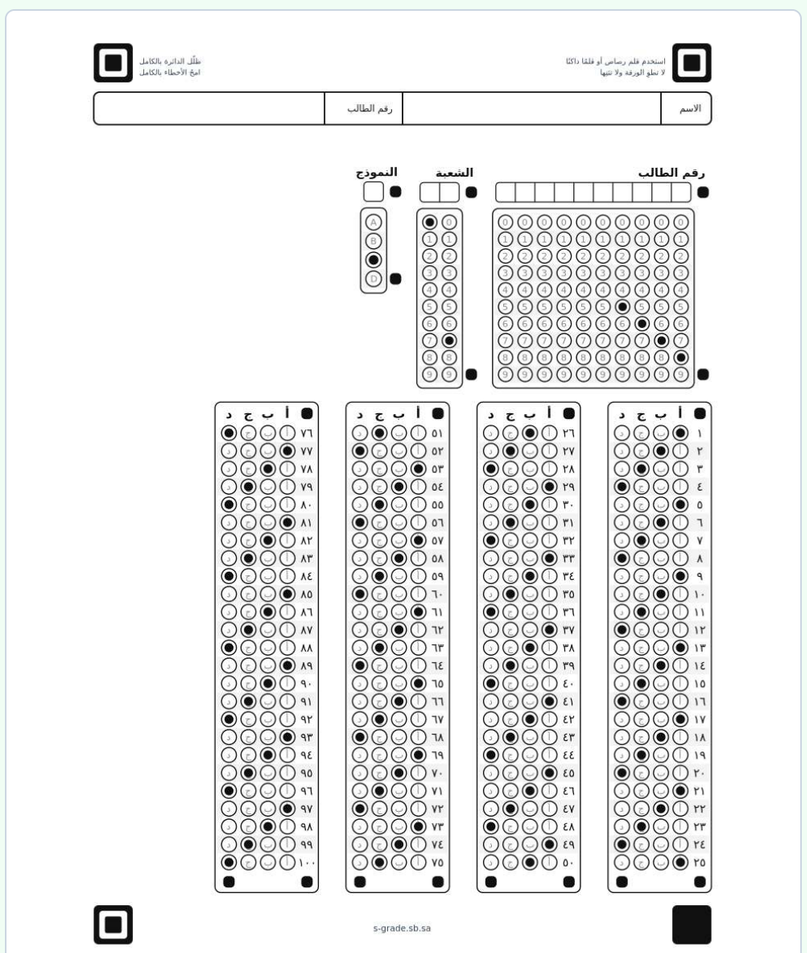
OVERLAY

field	expected	actual	
studentId	`1234`	`1234`	✓
form	`A`	`A`	✓
section	`42`	`42`	✓
score	`100`	`100`	✓

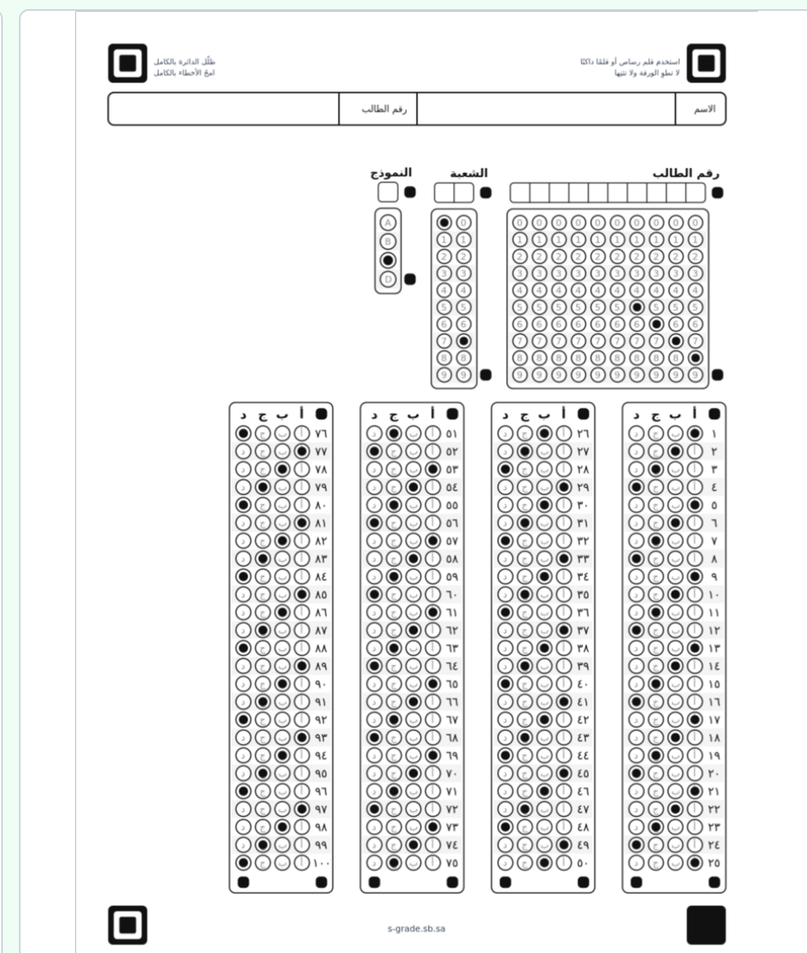
result.json

[AR] 100q · 10-id, last 4 digits only PASS

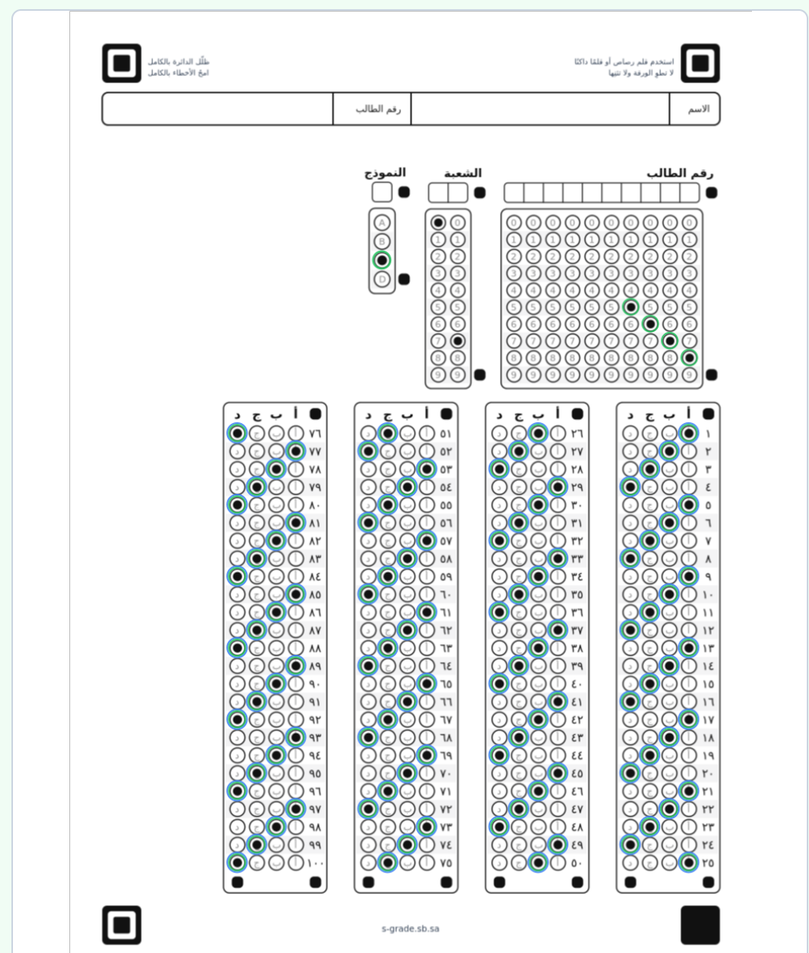
profile: `pristine` · 1054 passed · 0 failed



INPUT



WARPED



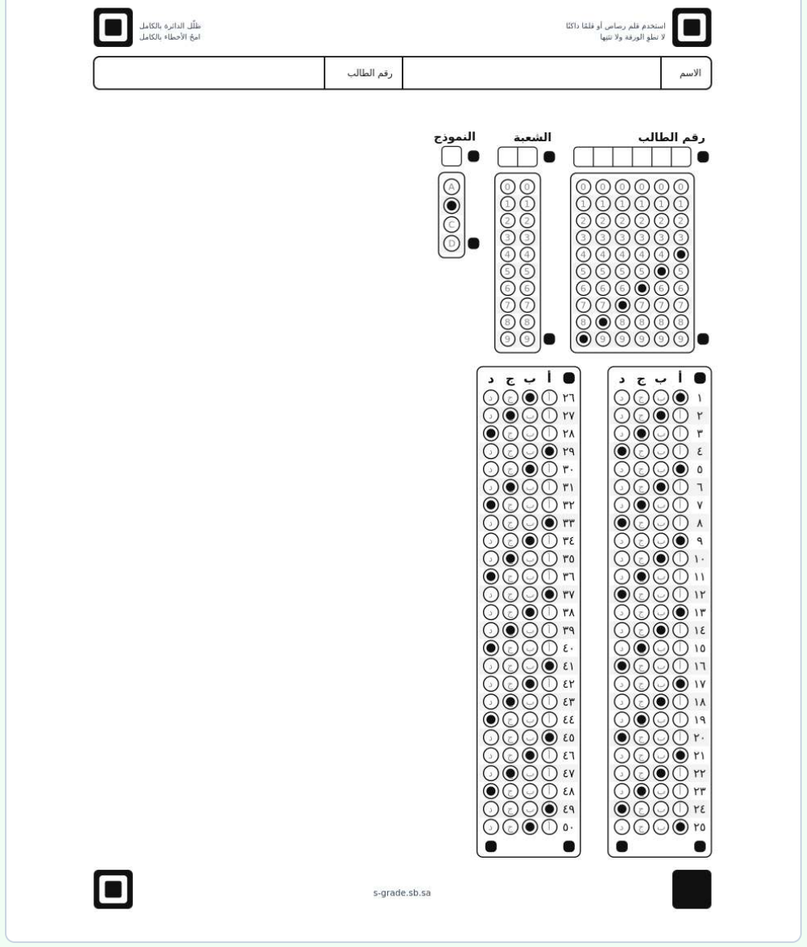
OVERLAY

field	expected	actual	
studentId	`5678`	`5678`	✓
form	`C`	`C`	✓
section	`07`	`07`	✓
score	`100`	`100`	✓

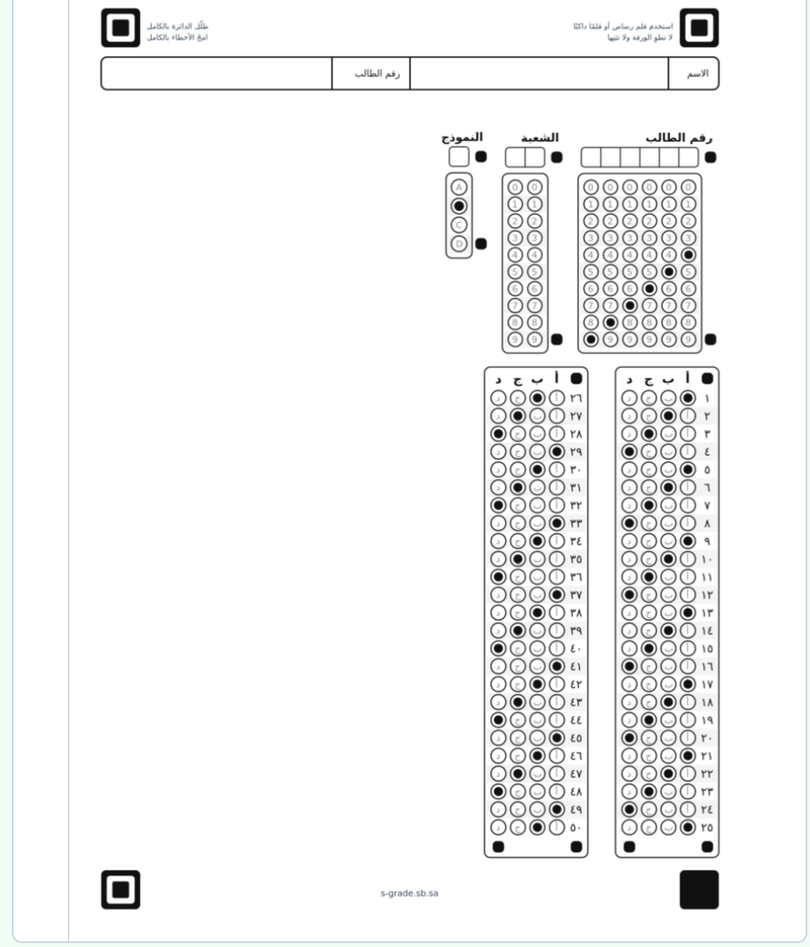
result.json

[AR] 50q · section left blank PASS

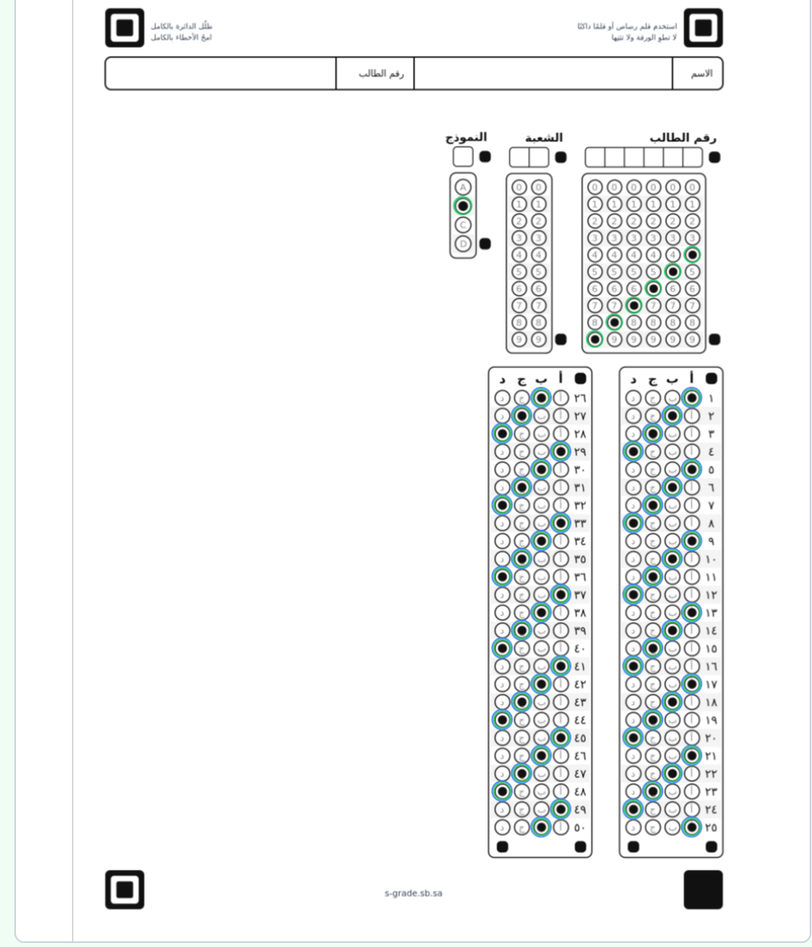
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



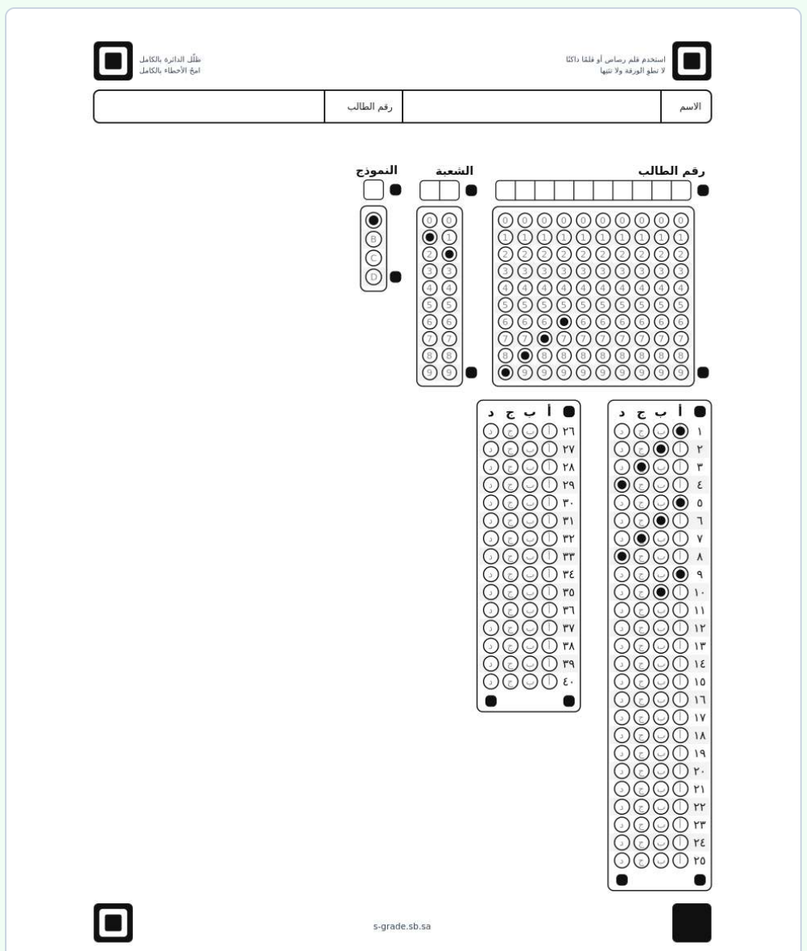
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
score	`50`	`50`	✓

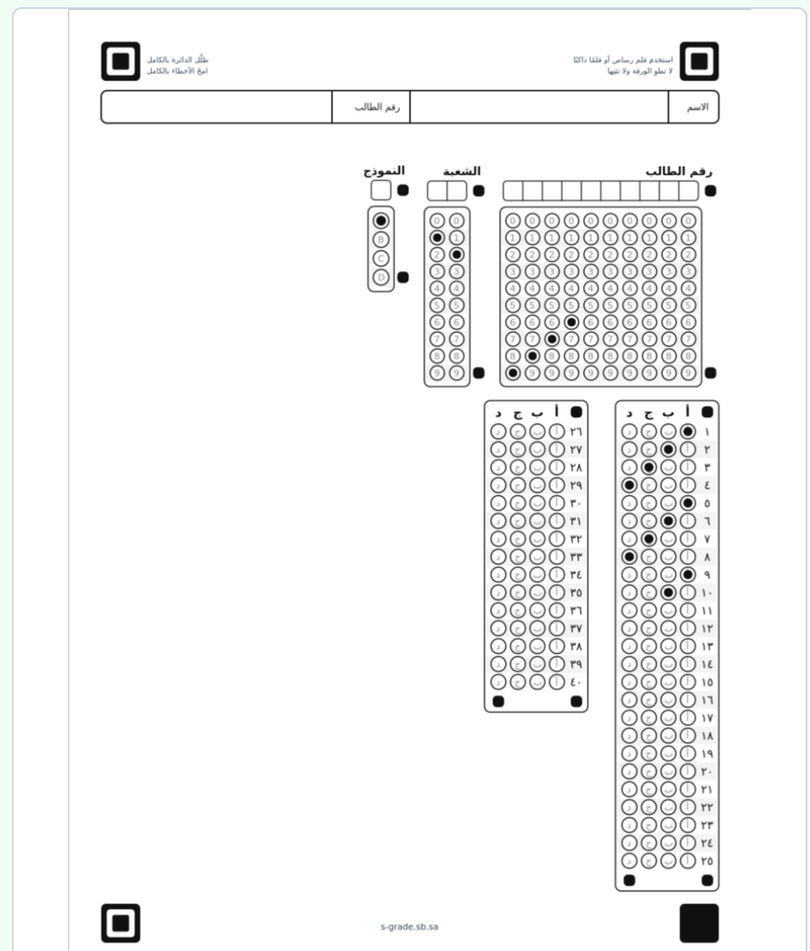
result.json

[AR] 40-printed / 10-used questions PASS

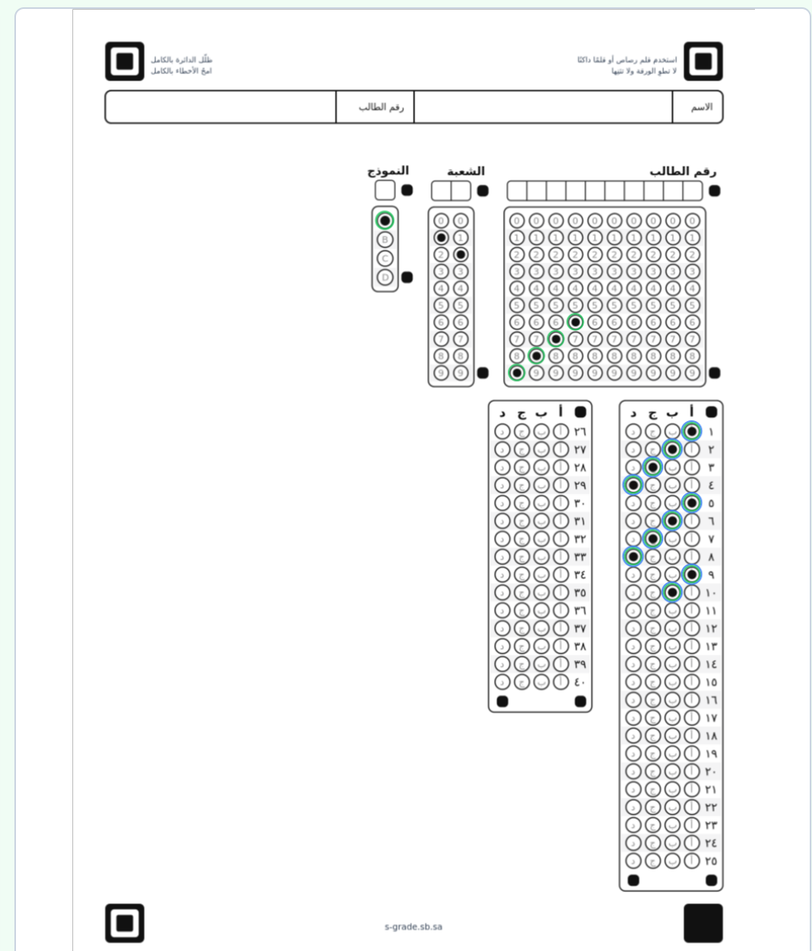
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



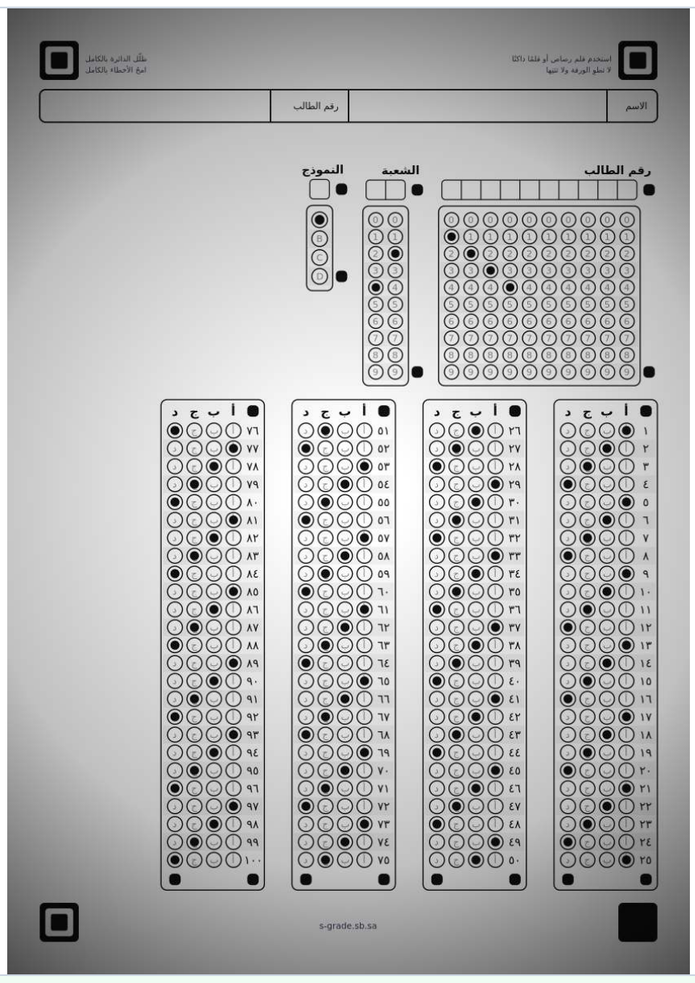
OVERLAY

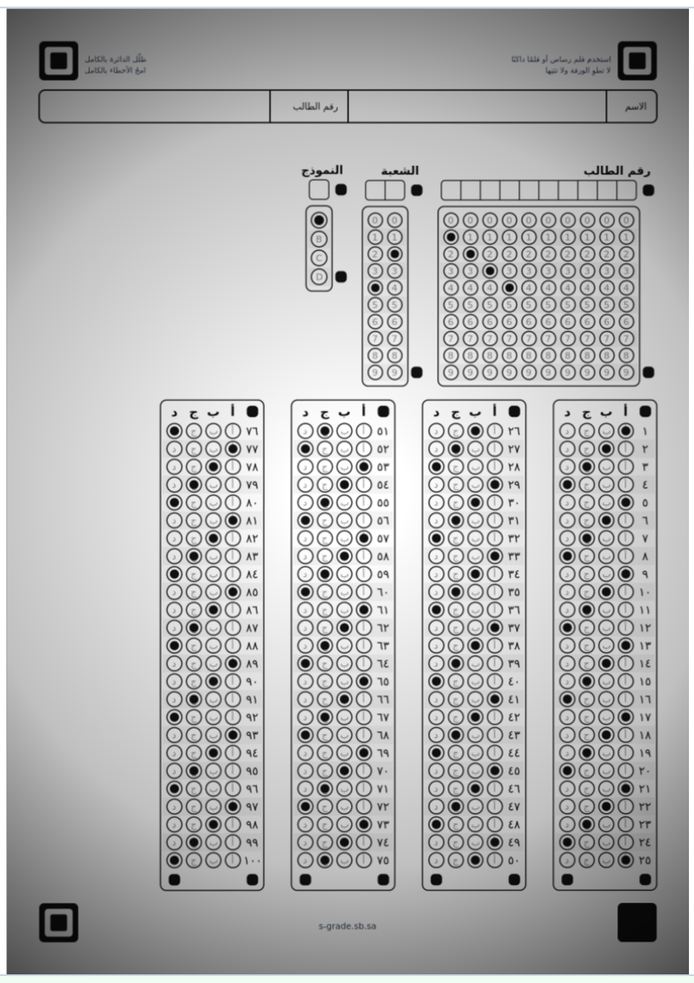
field	expected	actual	
studentId	`9876`	`9876`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`10`	`10`	✓

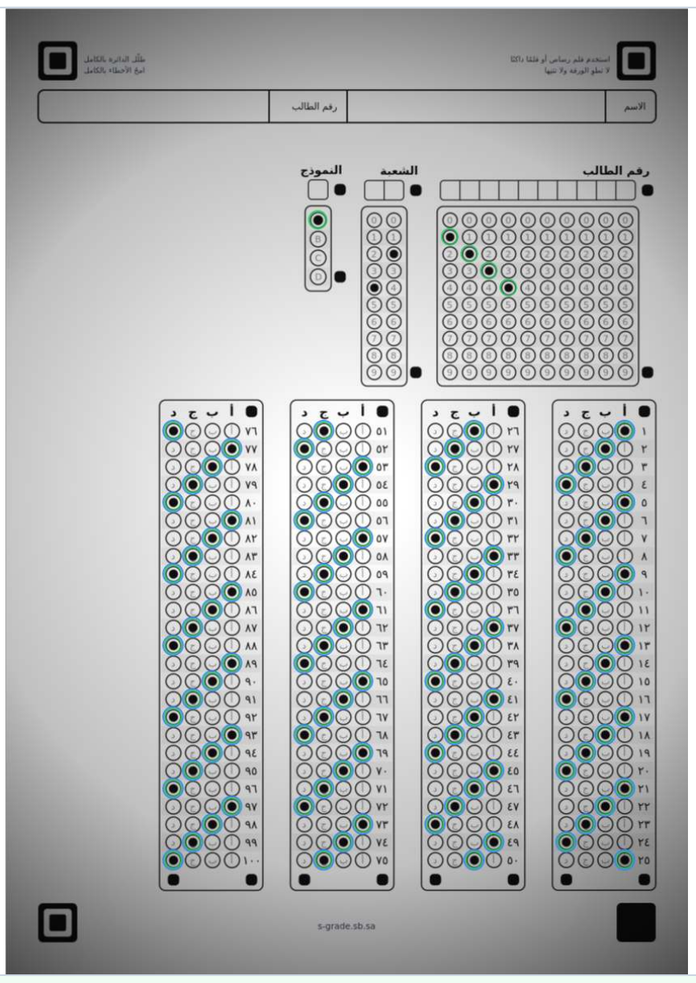
result.json

[AR] 100q · 10-id first 4 + lighting vignette PASS

profile: `lighting_vignette` · 1054 passed · 0 failed







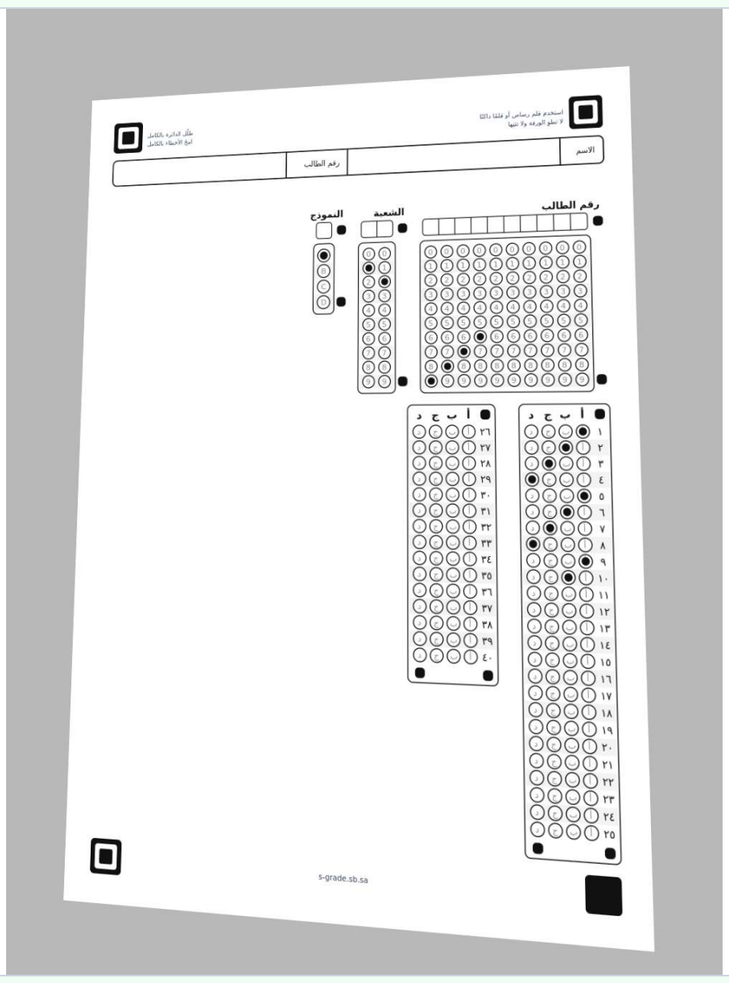
INPUT WARPED OVERLAY

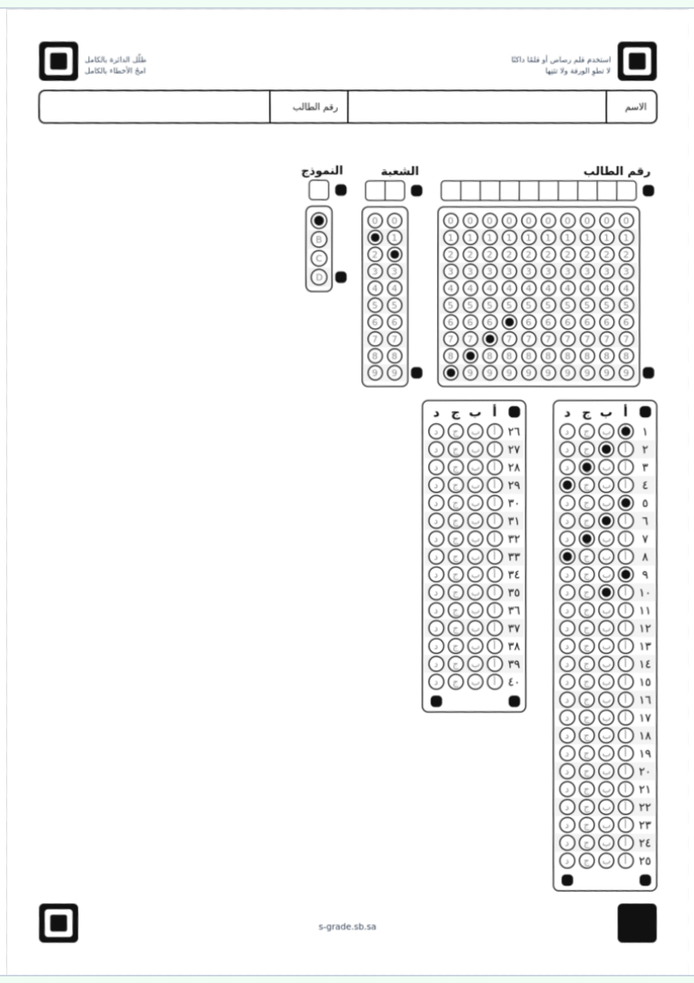
field	expected	actual	
studentId	`1234`	`1234`	✓
form	`A`	`A`	✓
section	`42`	`42`	✓
score	`100`	`100`	✓

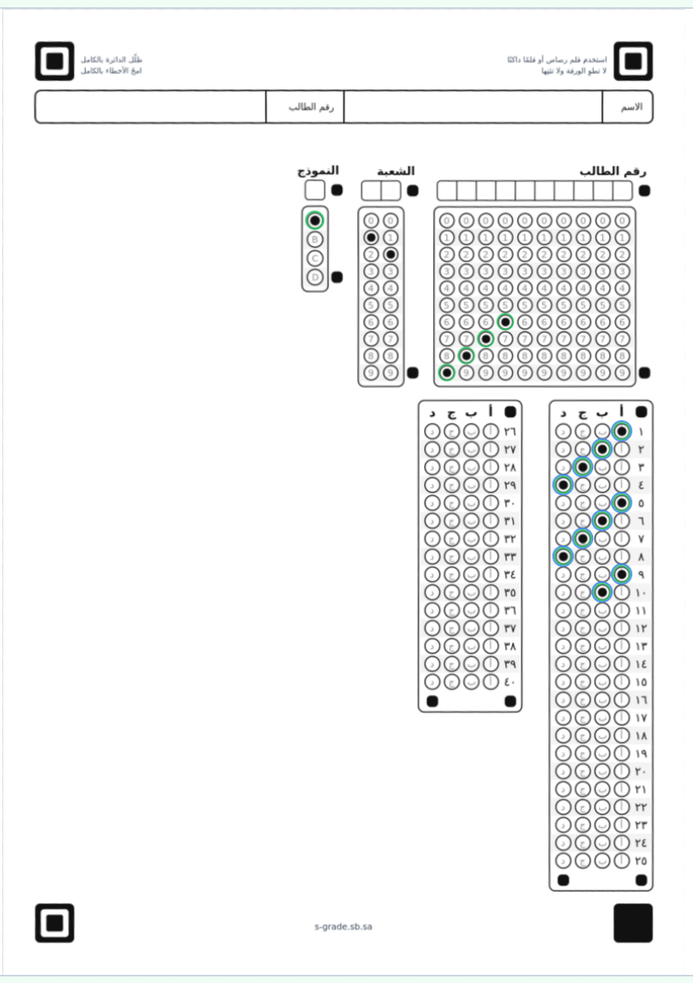
result.json

[AR] 40-printed / 10-used + mild perspective PASS

profile: `perspective_mild` · 574 passed · 0 failed







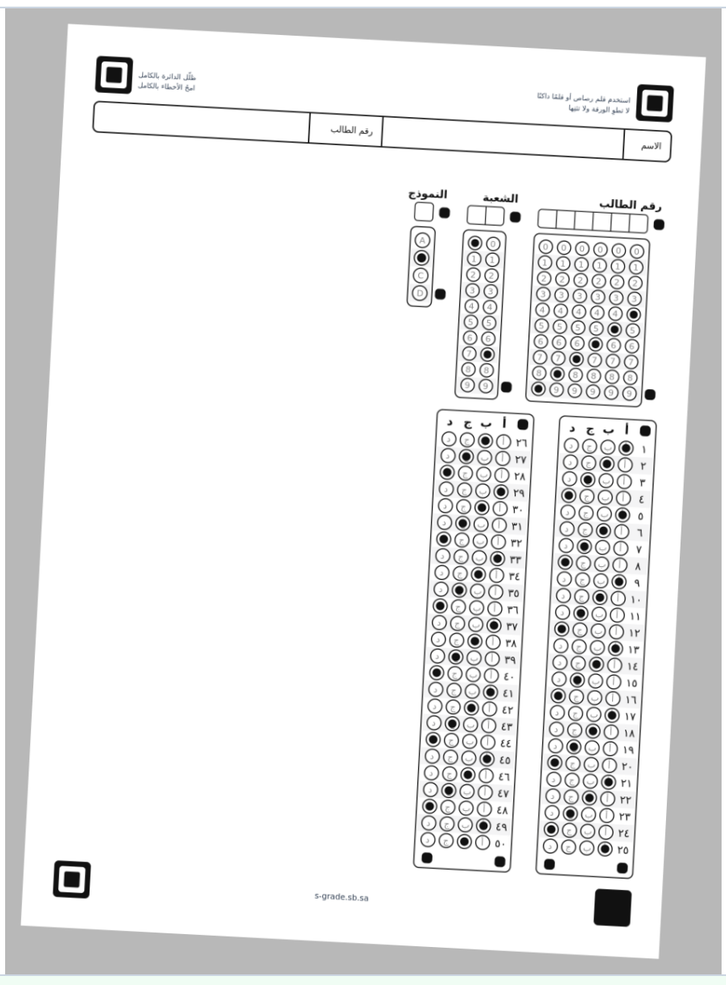
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`9876`	`9876`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`10`	`10`	✓

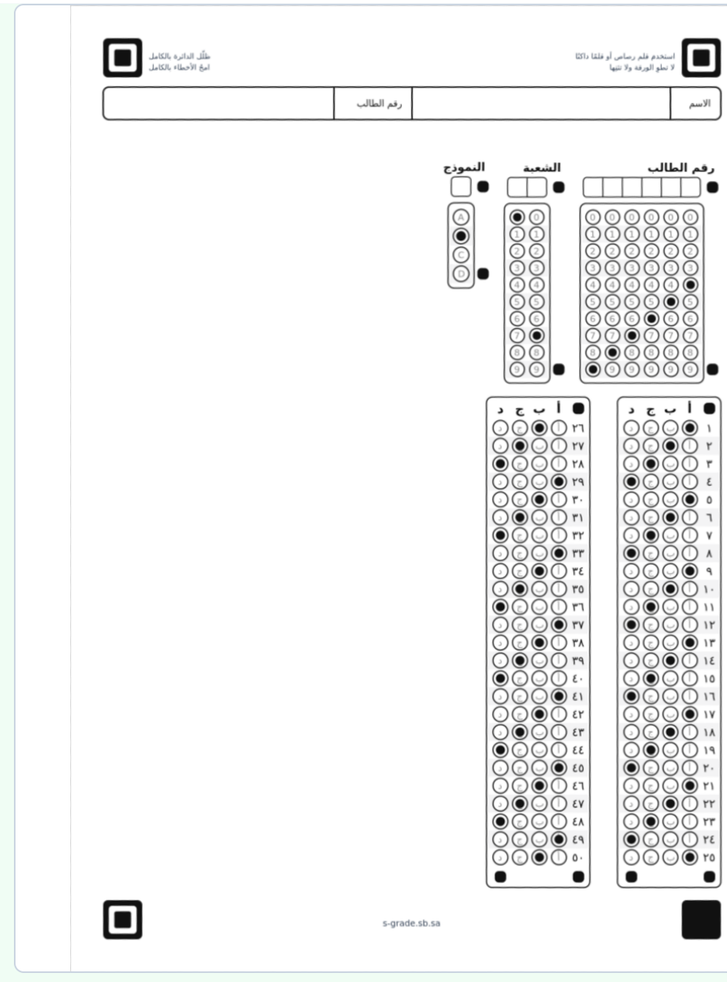
result.json

[AR] 50q · rotated -3° PASS

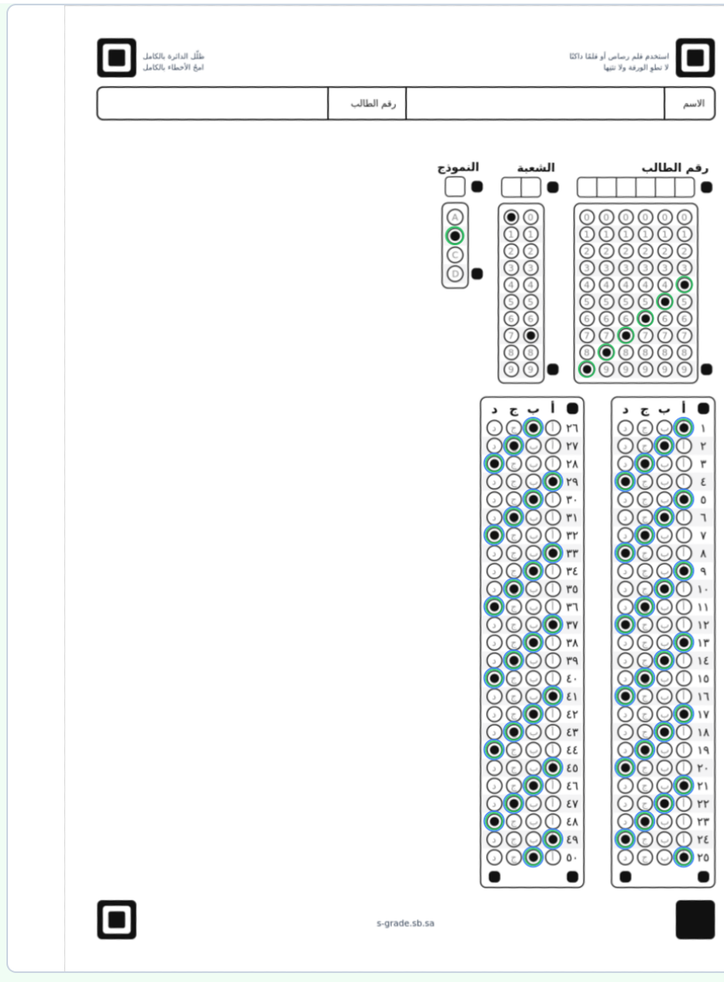
profile: `rotated_neg3deg` · 574 passed · 0 failed



INPUT



WARPED



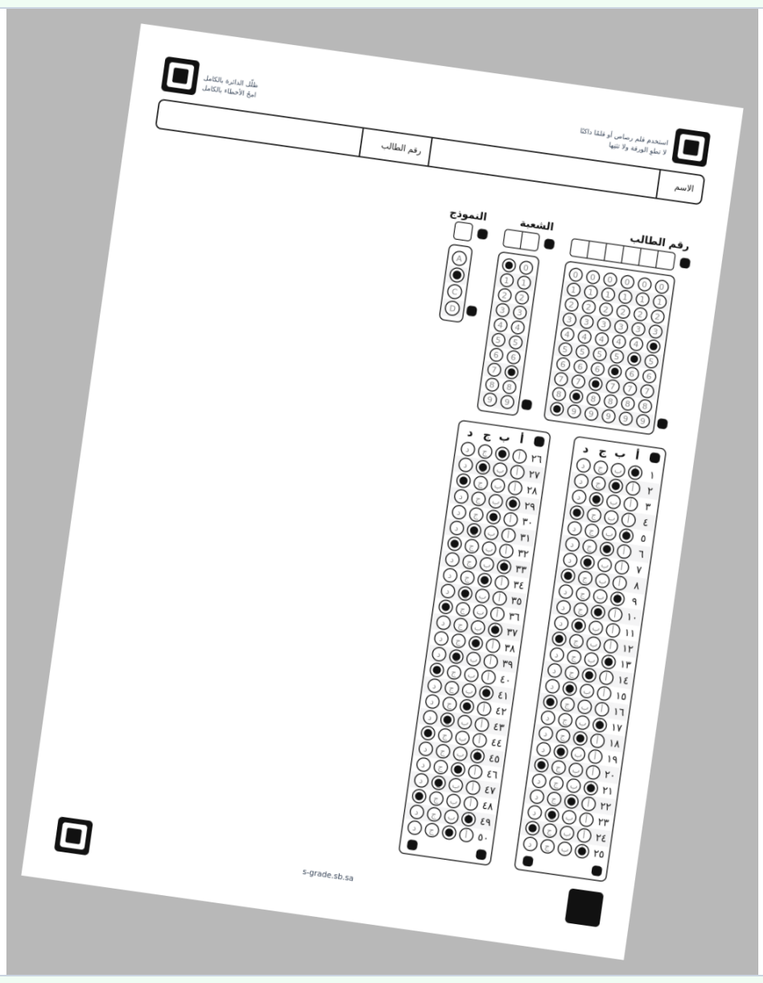
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

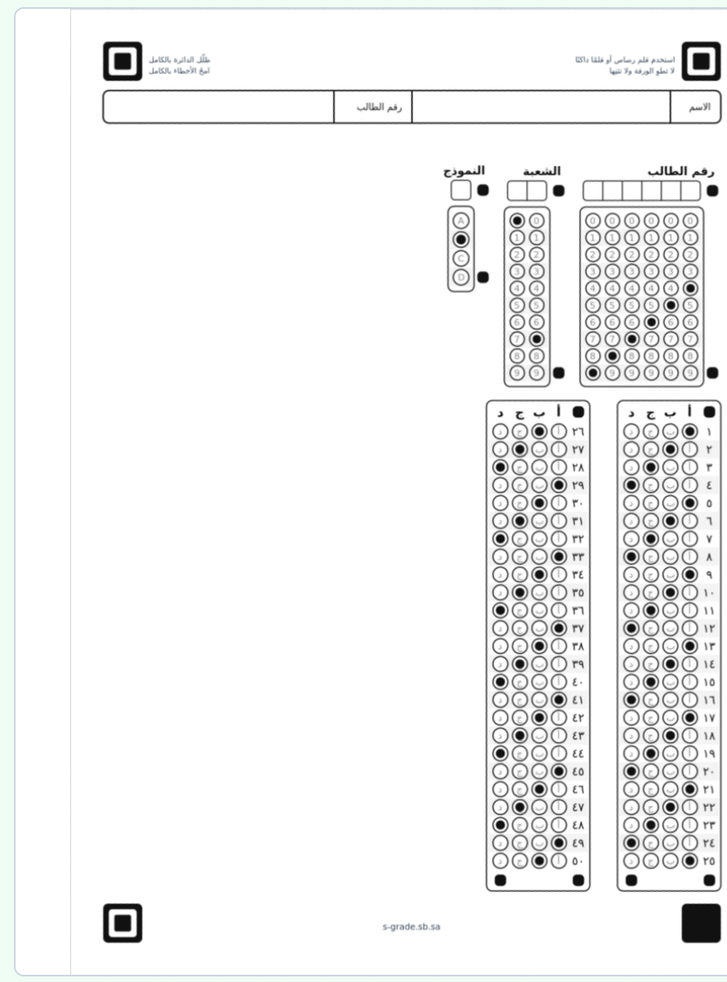
result.json

[AR] 50q · rotated -8° PASS

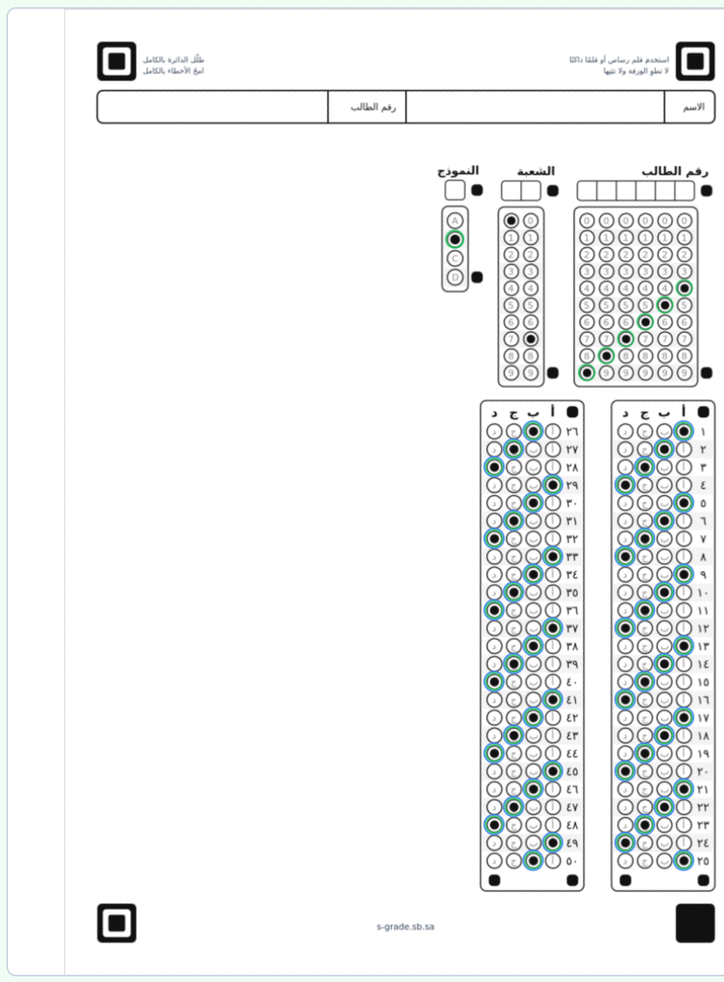
profile: `rotated_neg8deg` · 574 passed · 0 failed



INPUT



WARPED



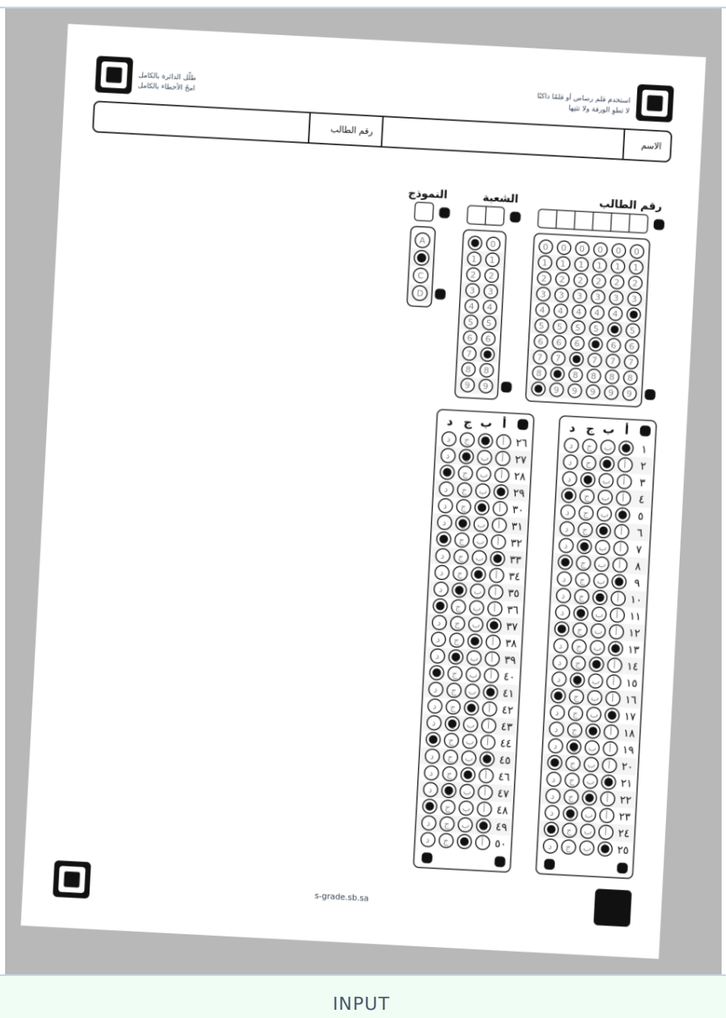
OVERLAY

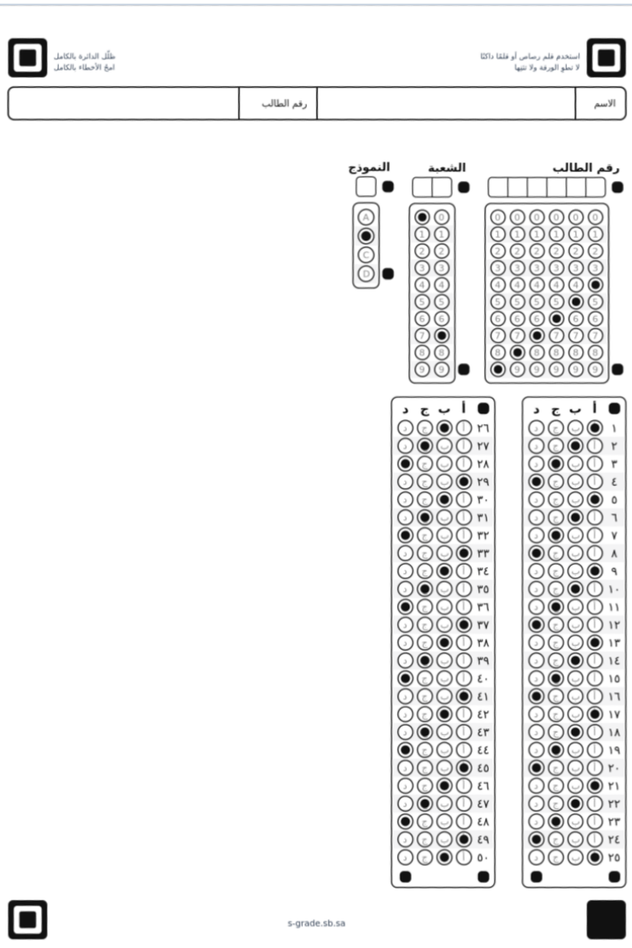
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

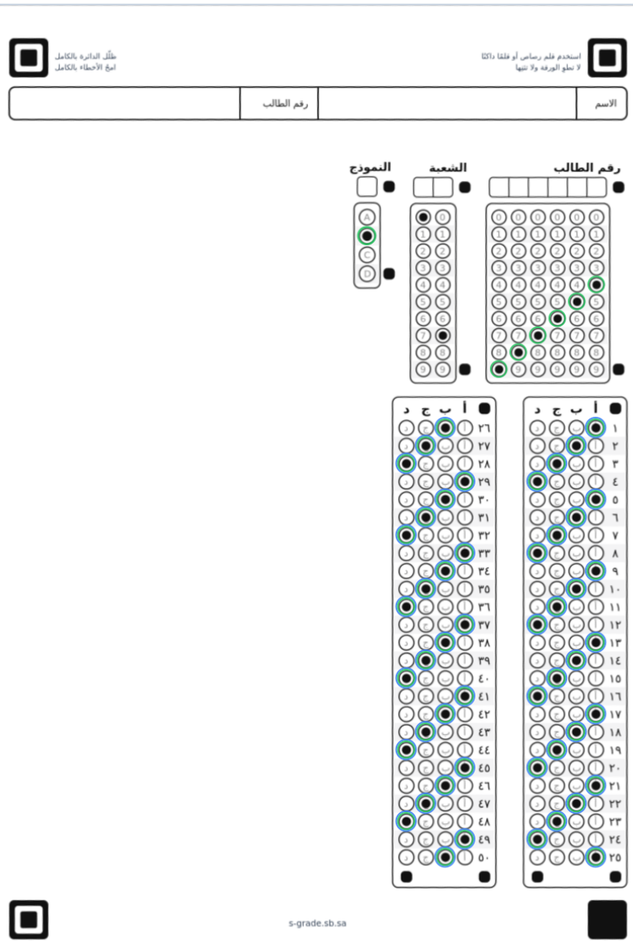
result.json

[AR] 50q · rotated 3° PASS

profile: `rotated_3deg` · 574 passed · 0 failed







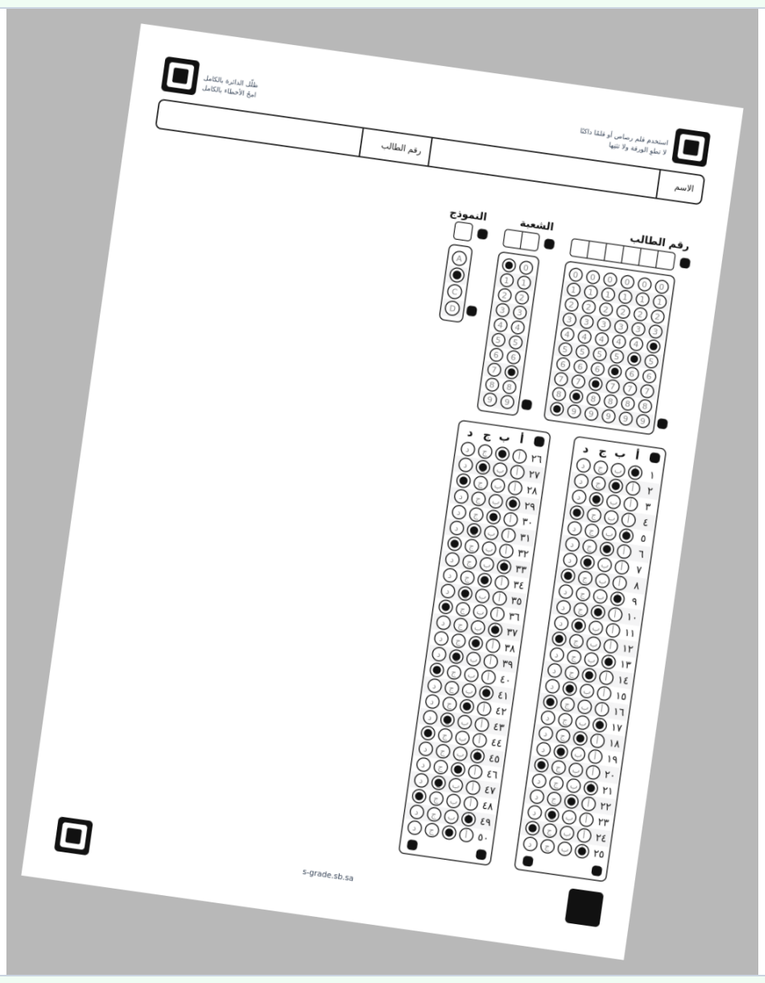
INPUT WARPED OVERLAY

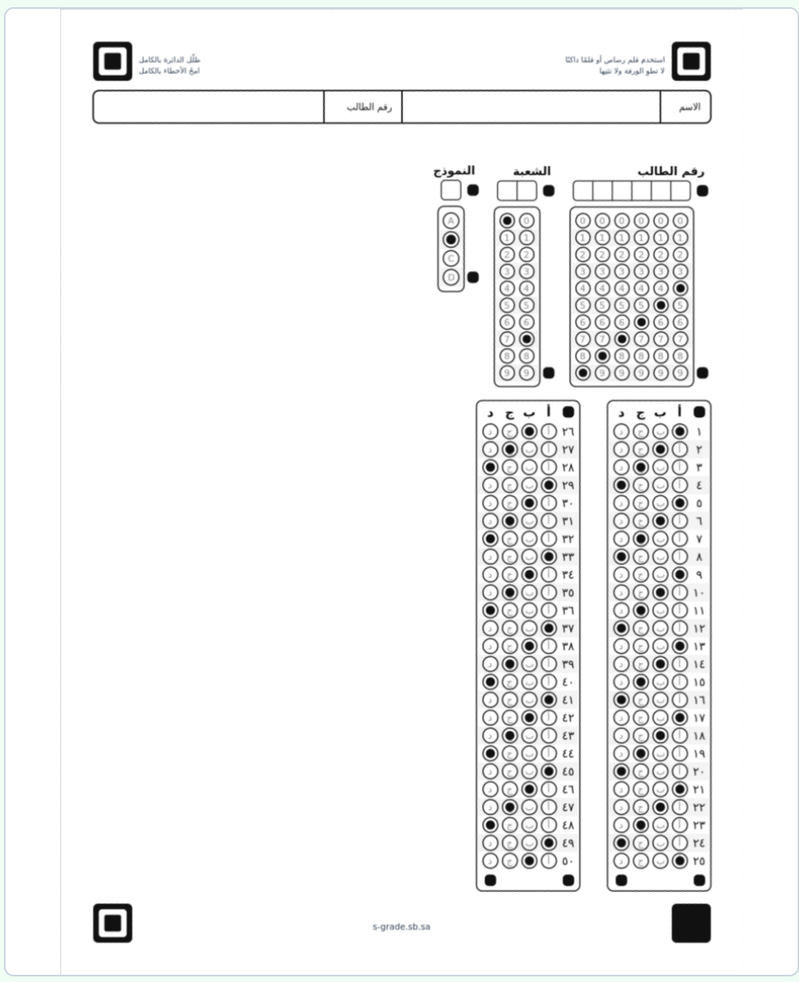
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

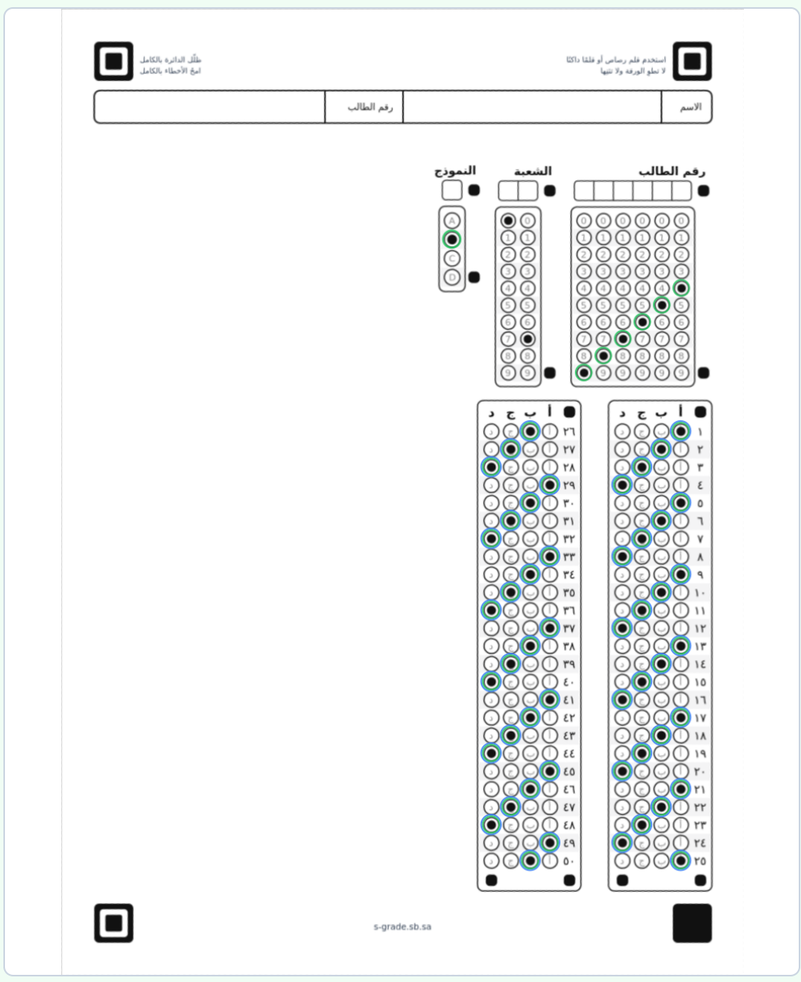
result.json

[AR] 50q · rotated 8° PASS

profile: `rotated_8deg` · 574 passed · 0 failed







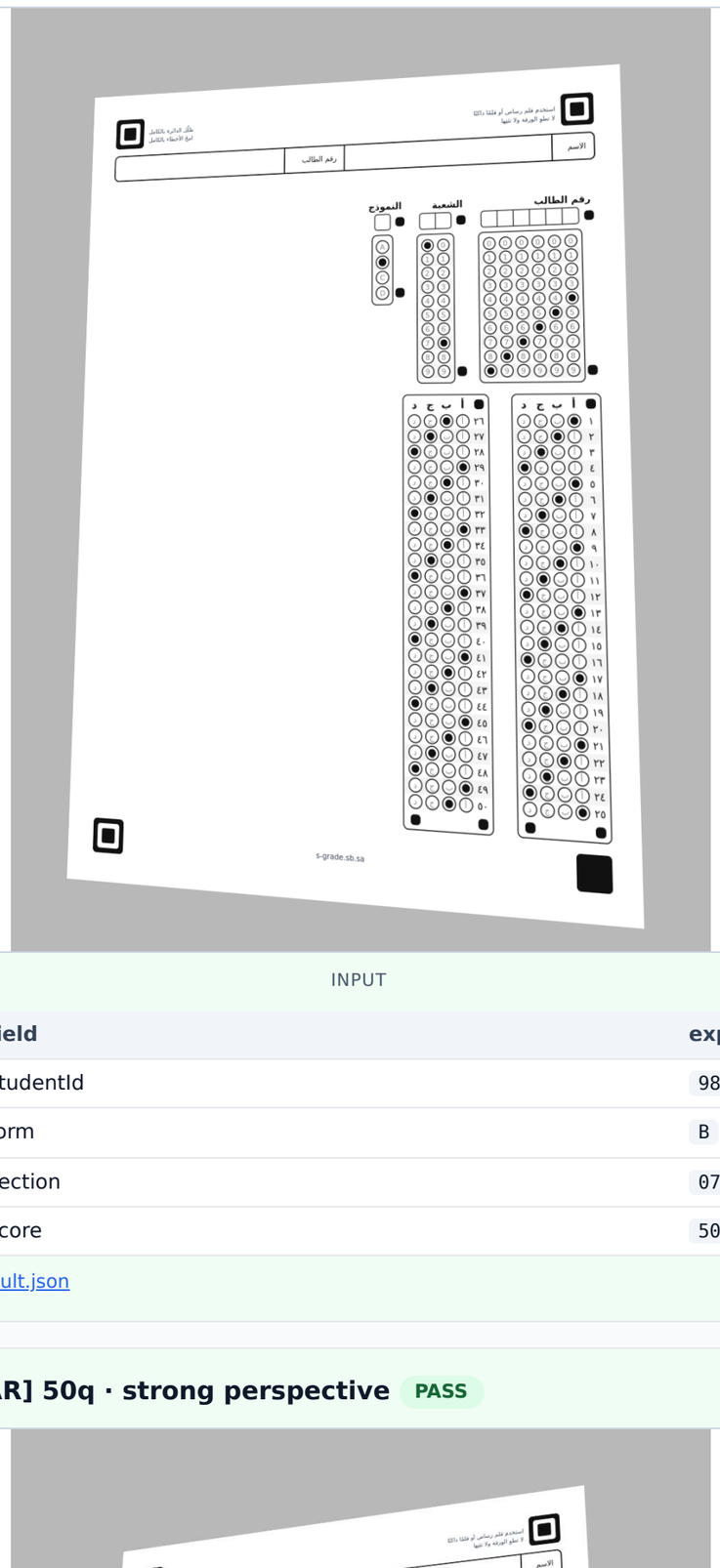
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

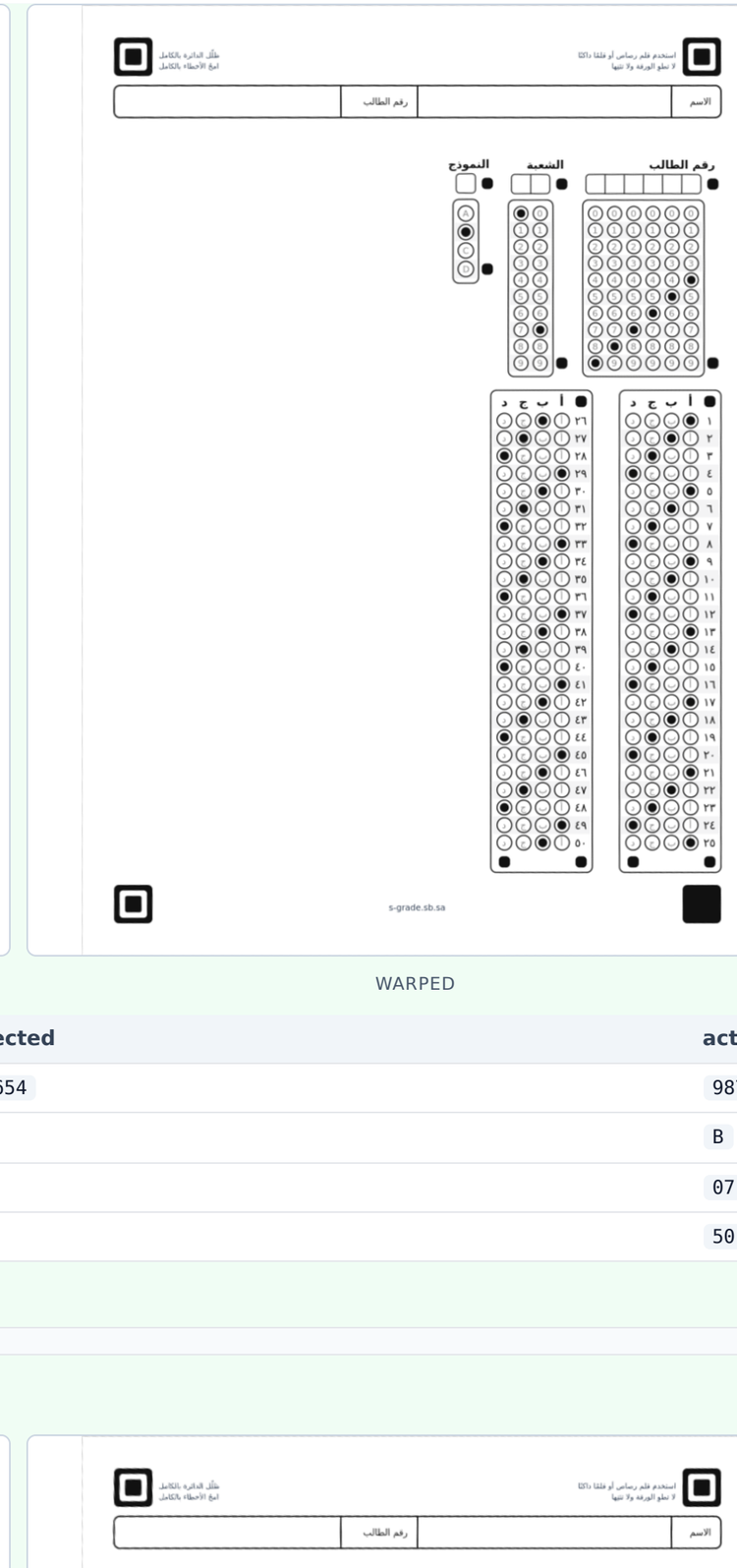
result.json

[AR] 50q · mild perspective PASS

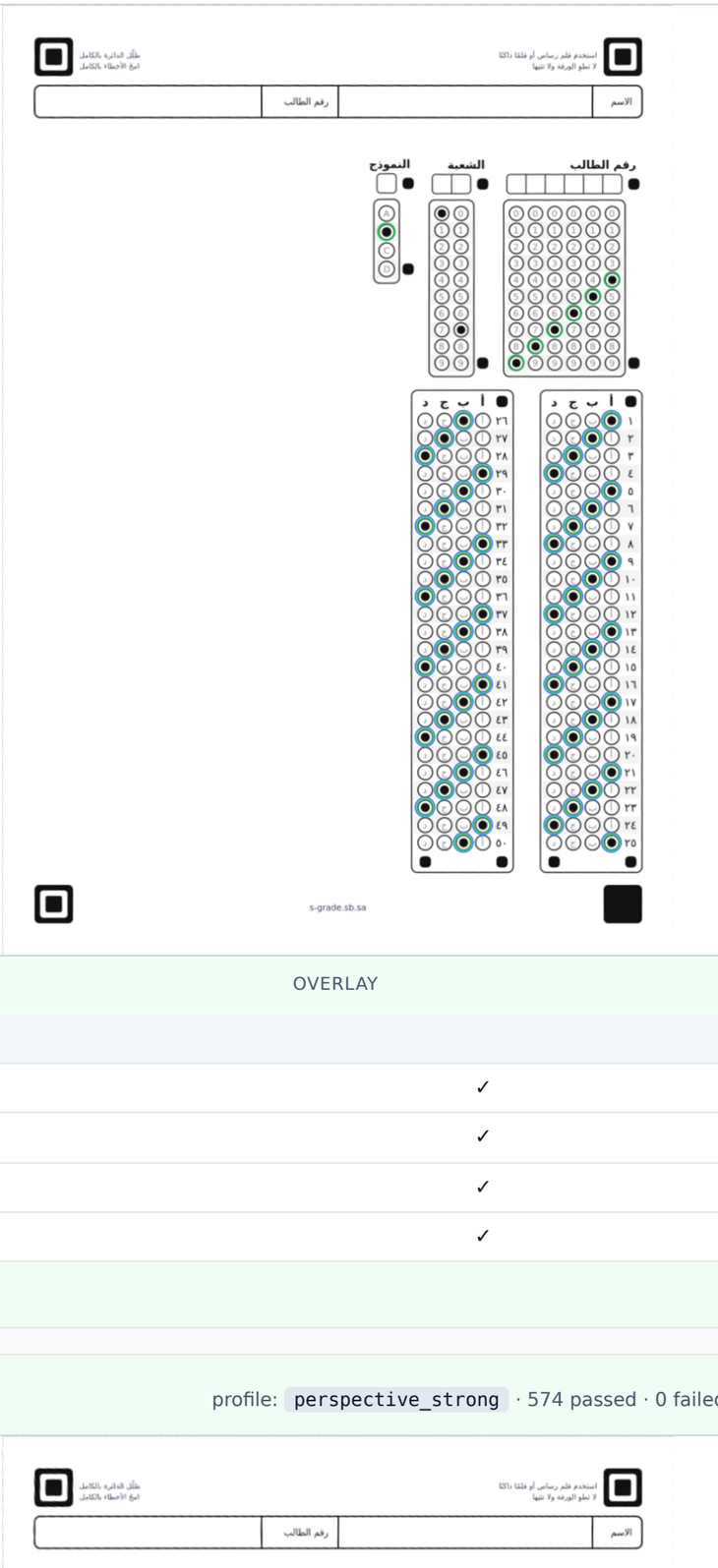
profile: `perspective_mild` · 574 passed · 0 failed



INPUT



WARPED



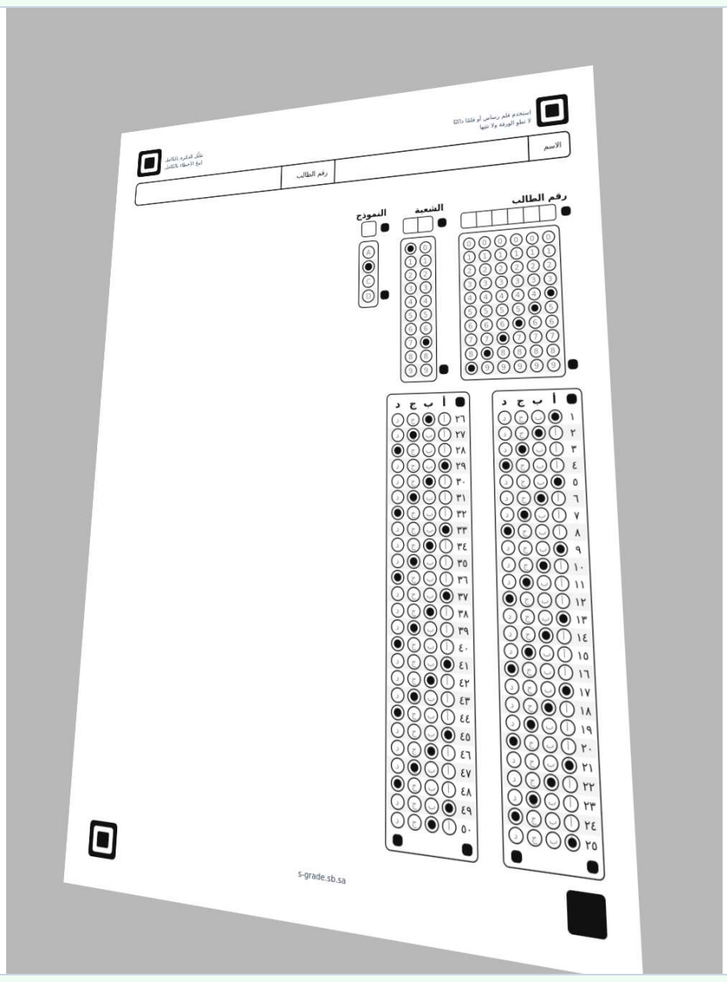
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

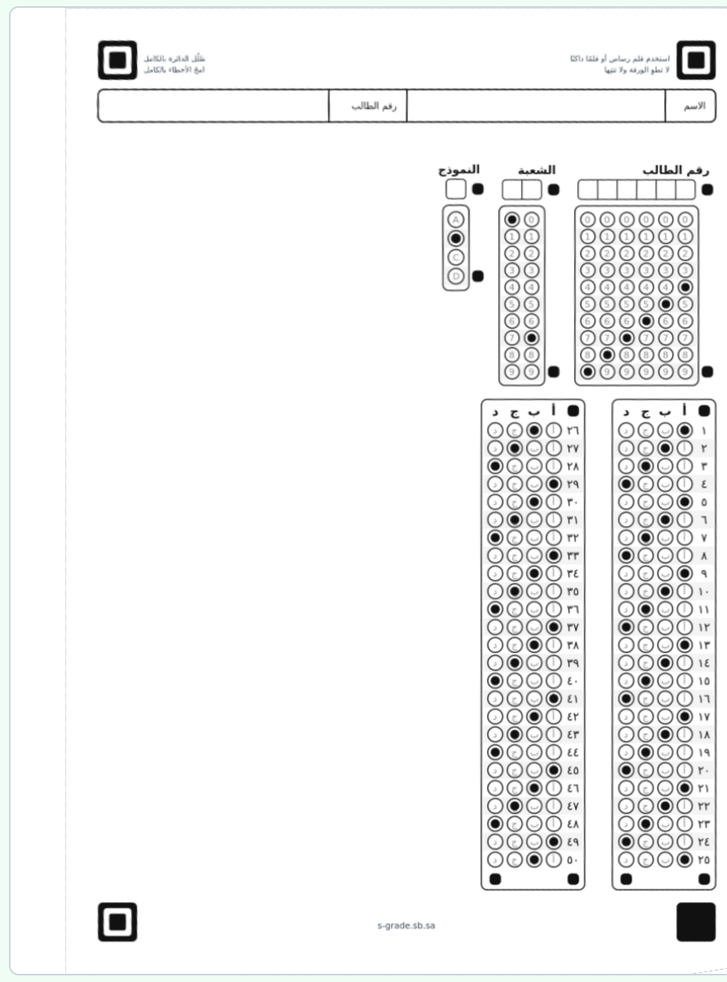
result.json

[AR] 50q · strong perspective PASS

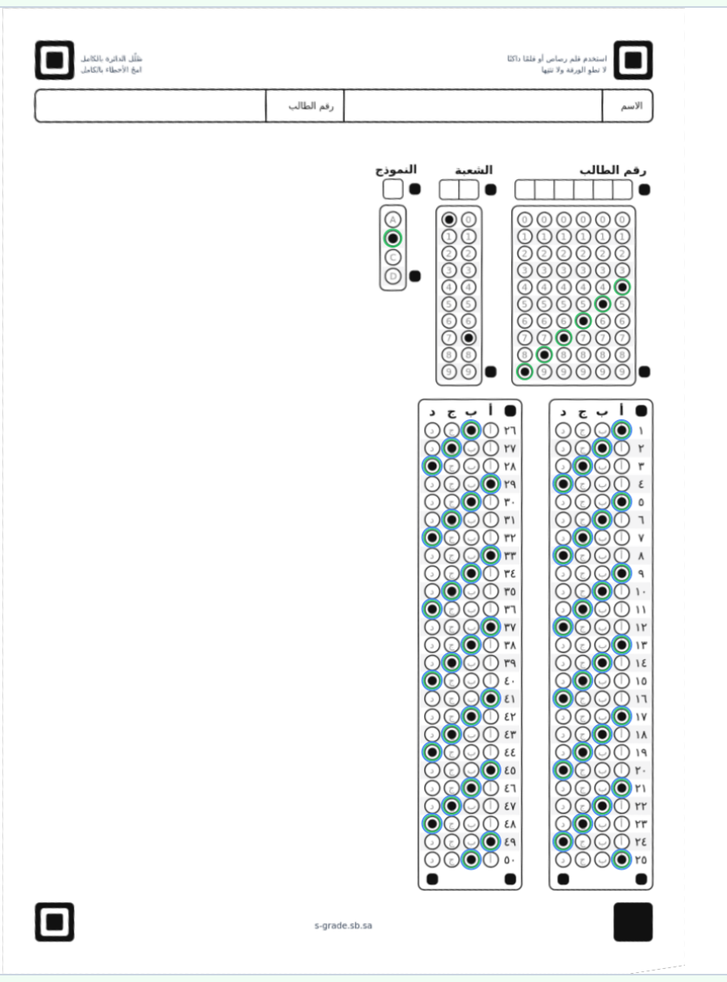
profile: `perspective_strong` · 574 passed · 0 failed



INPUT



WARPED



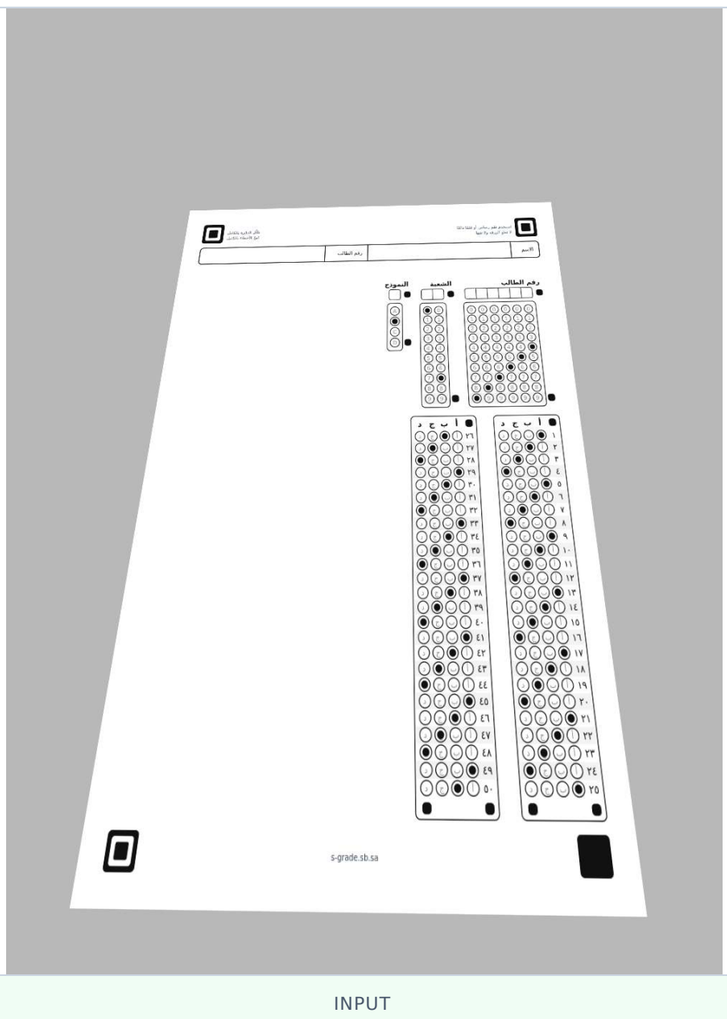
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

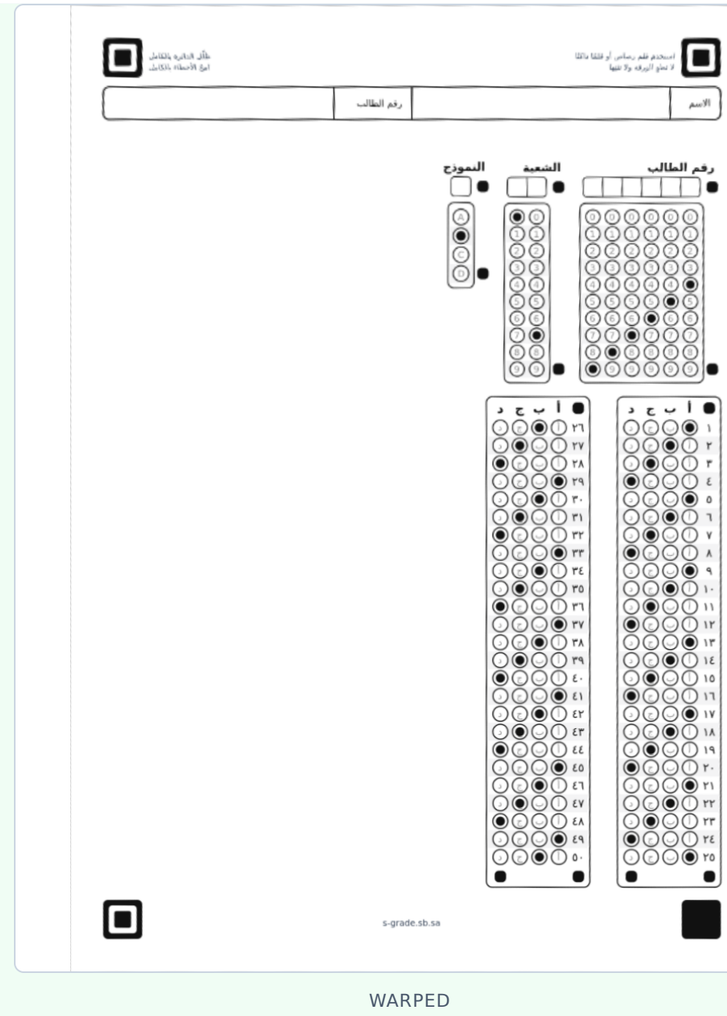
result.json

[AR] 50q · steep keystone (phone low angle) PASS

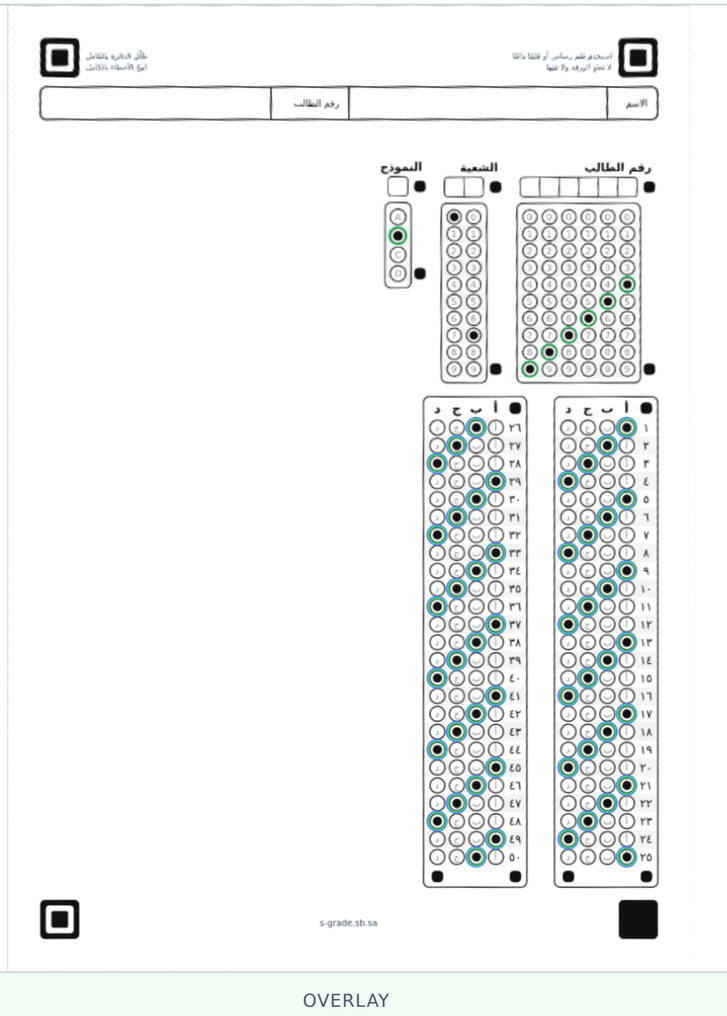
profile: `perspective_steep` · 574 passed · 0 failed



INPUT



WARPED



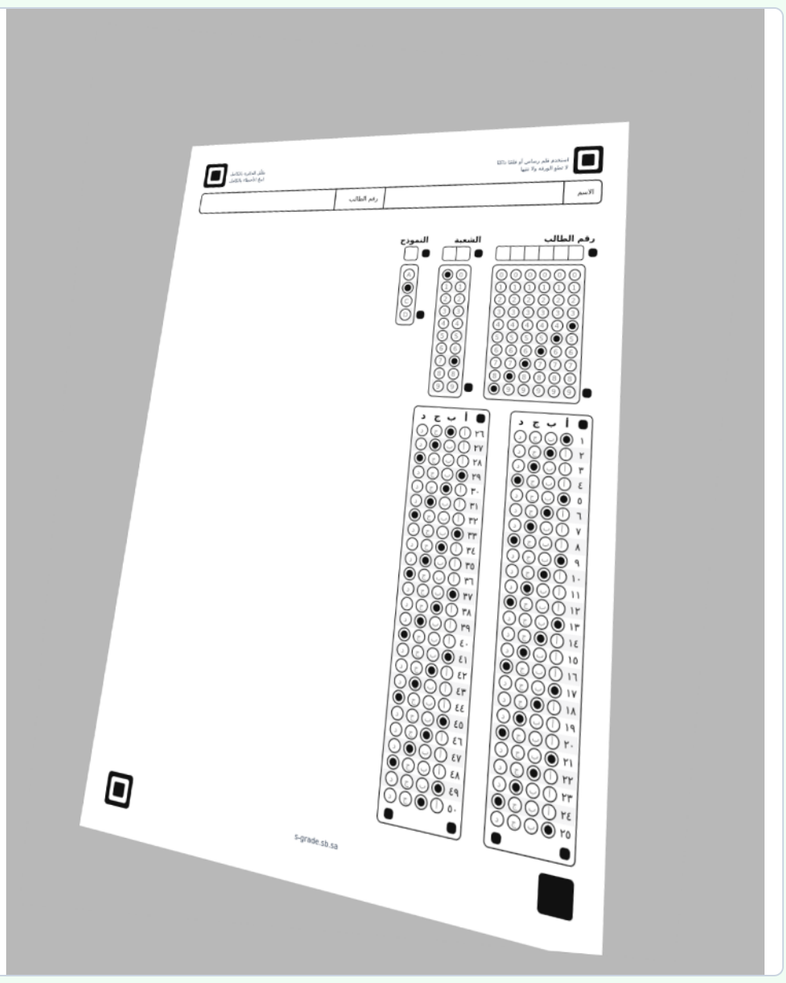
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

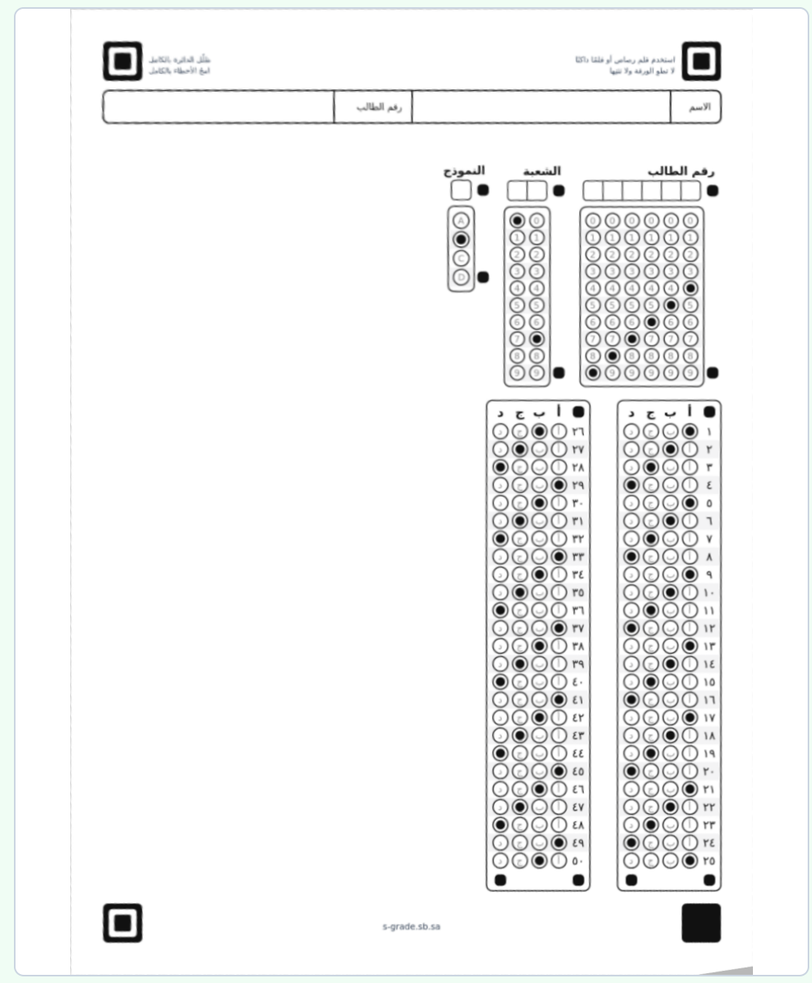
result.json

[AR] 50q · combined tilt + rot PASS

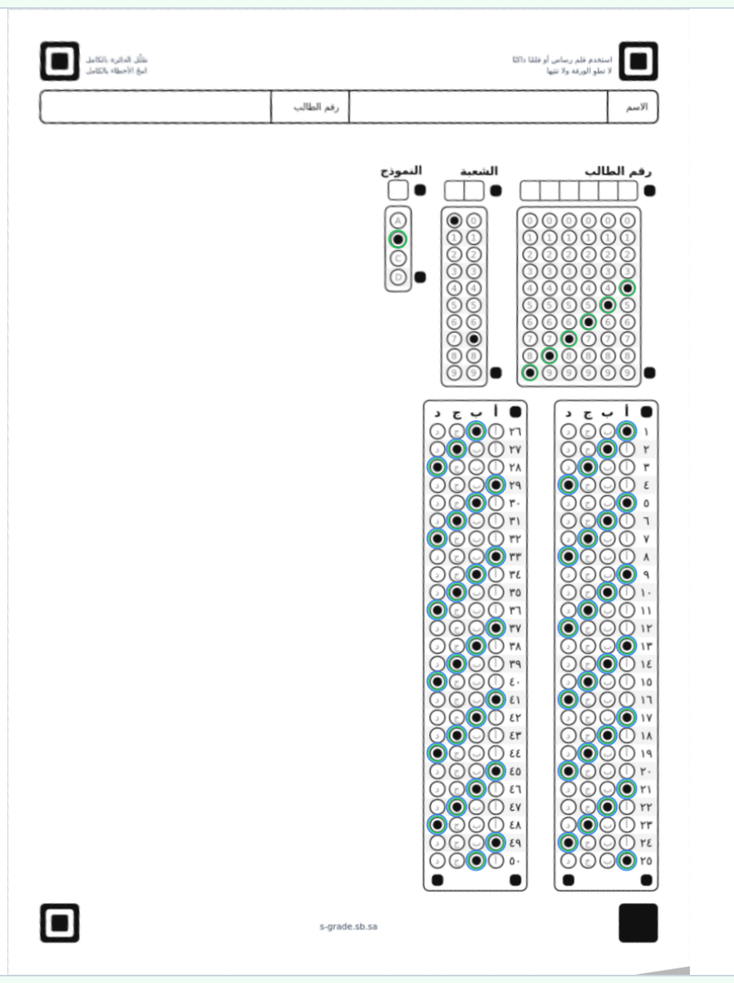
profile: `tilt_combined` · 574 passed · 0 failed



INPUT



WARPED



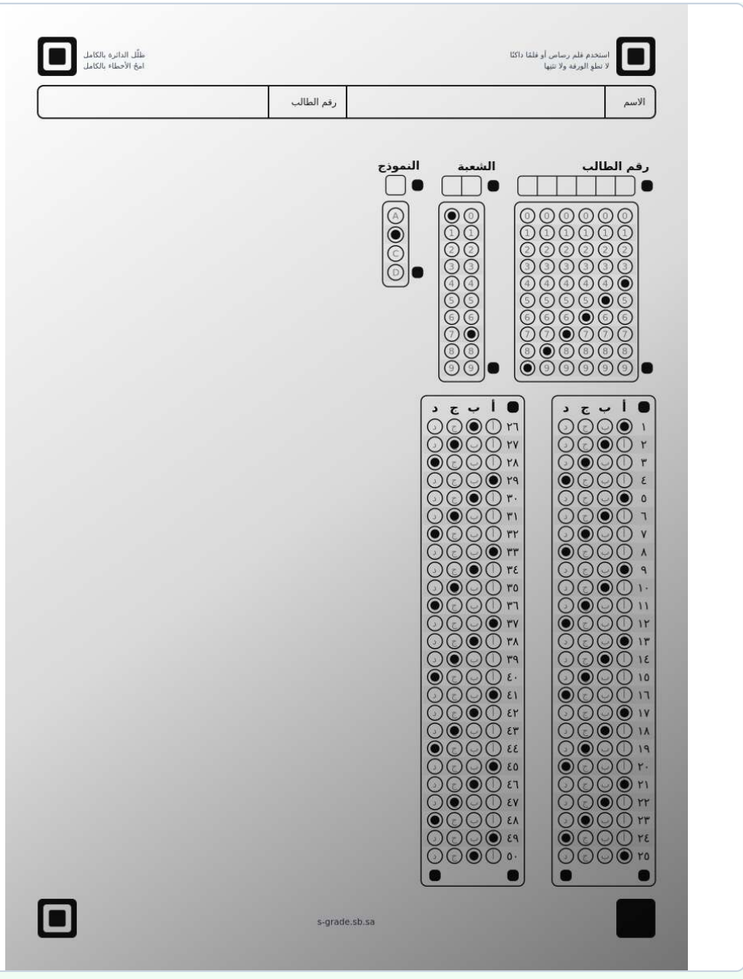
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

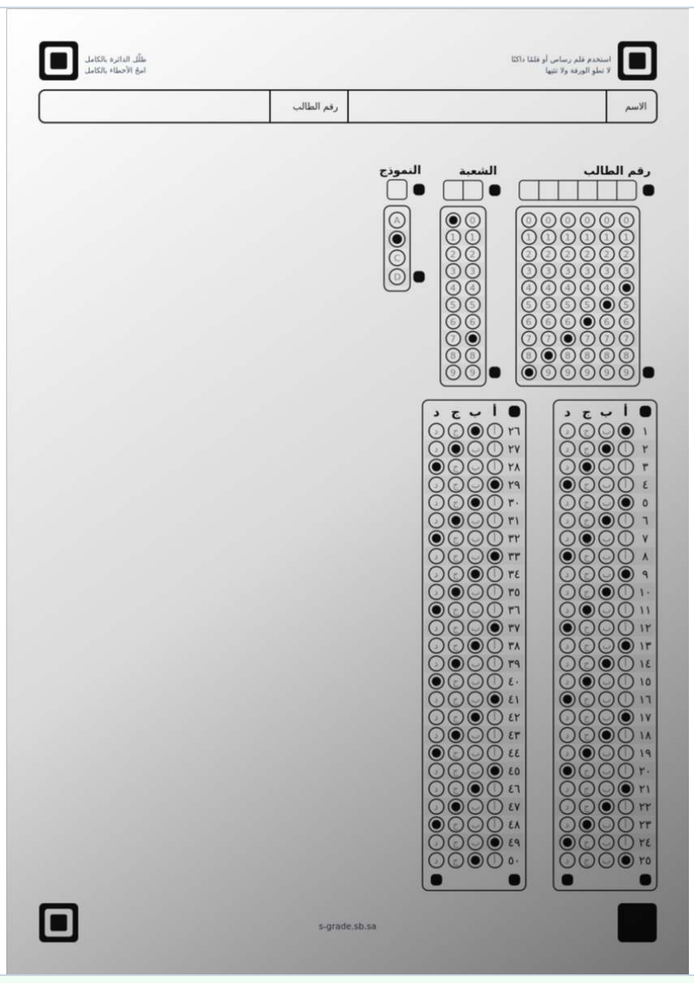
result.json

[AR] 50q · lighting gradient PASS

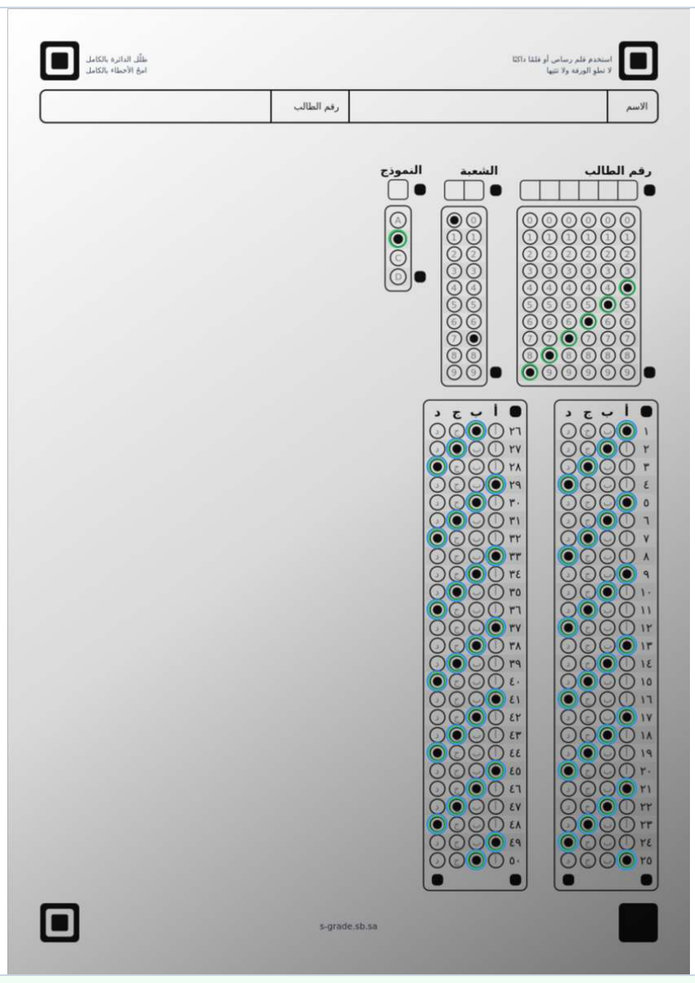
profile: `lighting_gradient` · 574 passed · 0 failed



INPUT



WARPED



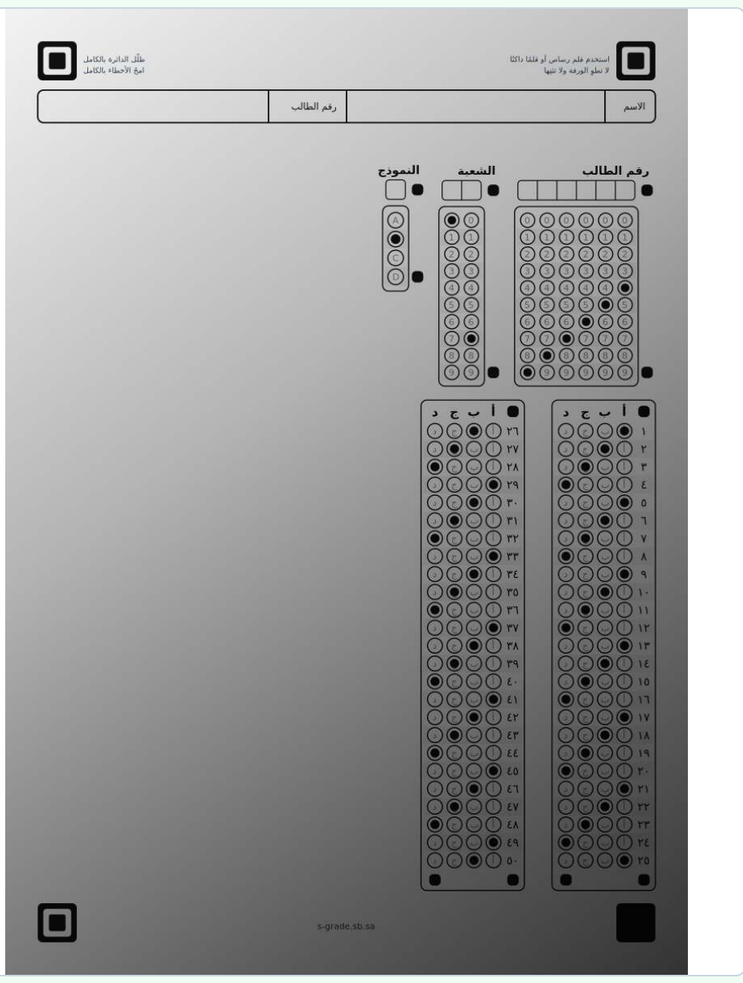
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

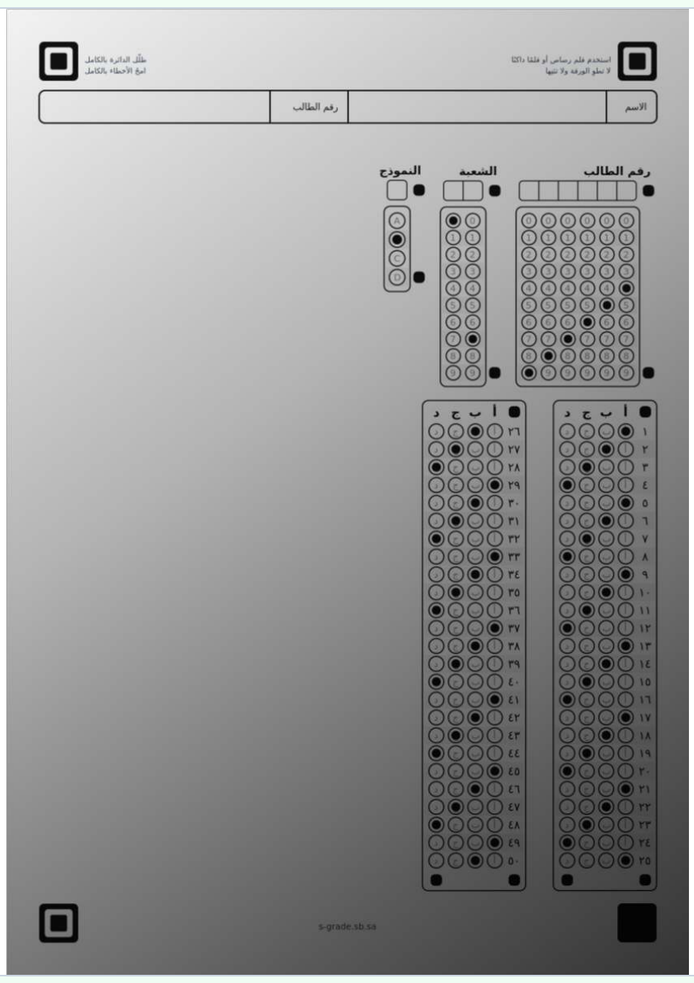
result.json

[AR] 50q · lighting HEAVY gradient PASS

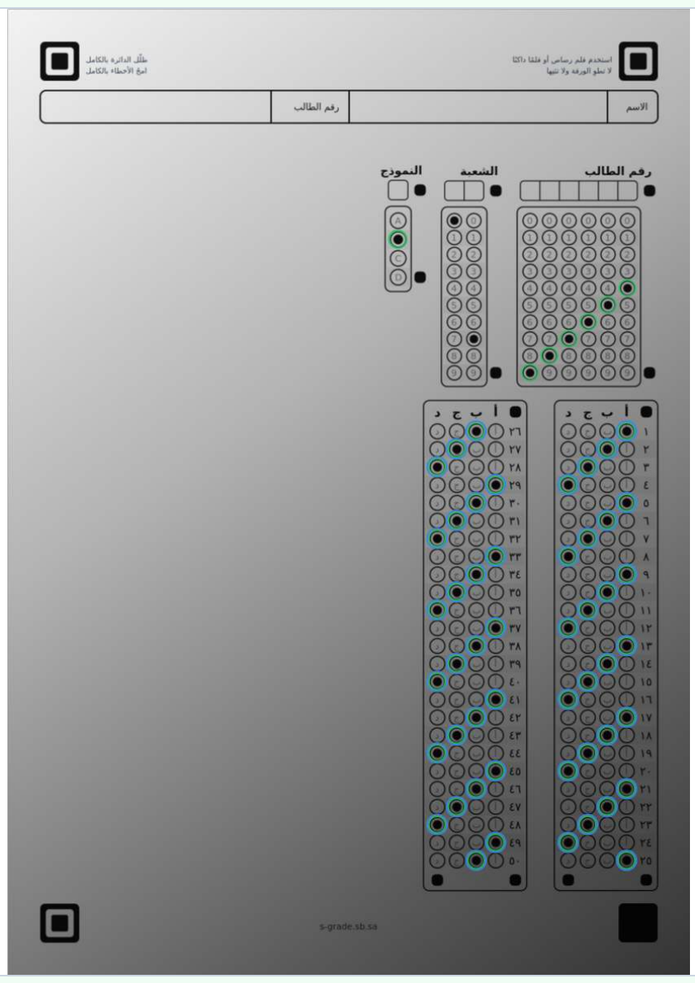
profile: `lighting_heavy_gradient` · 574 passed · 0 failed



INPUT



WARPED



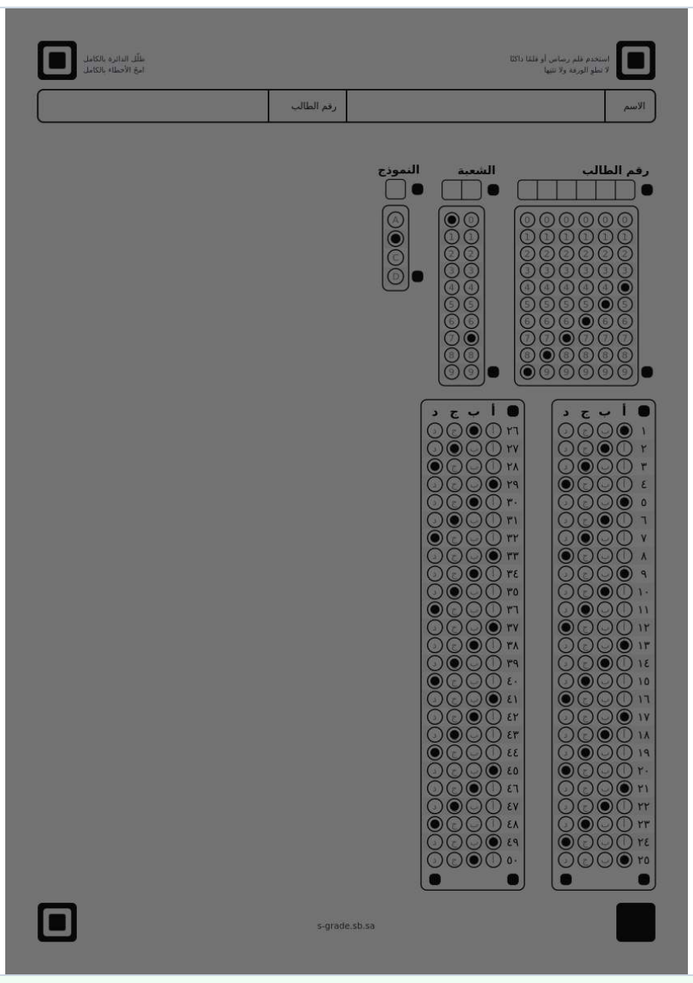
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

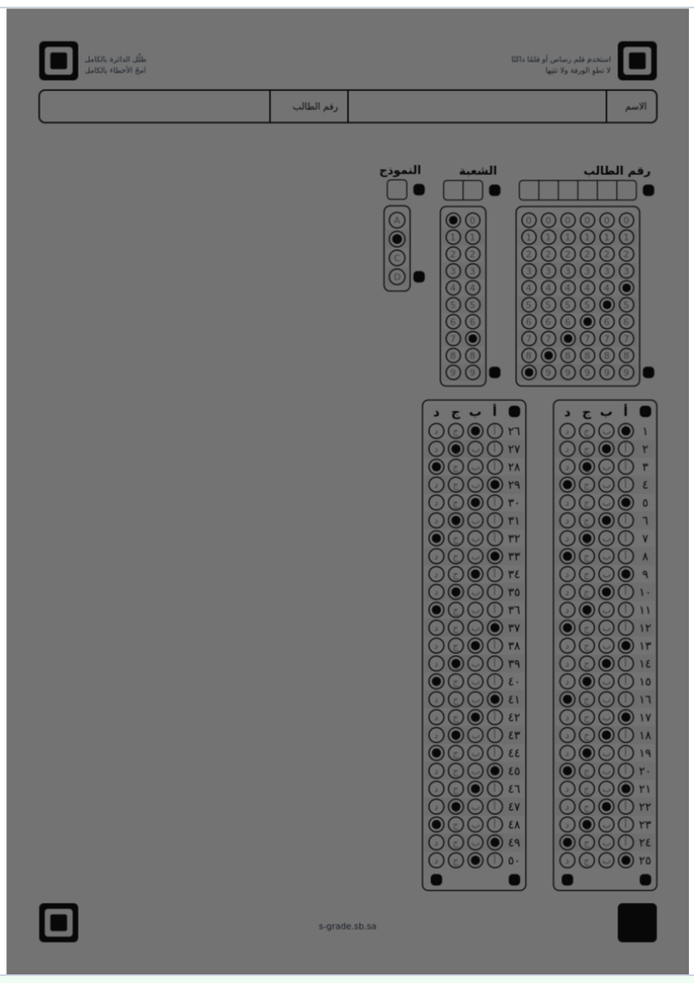
result.json

[AR] 50q · lighting global dark PASS

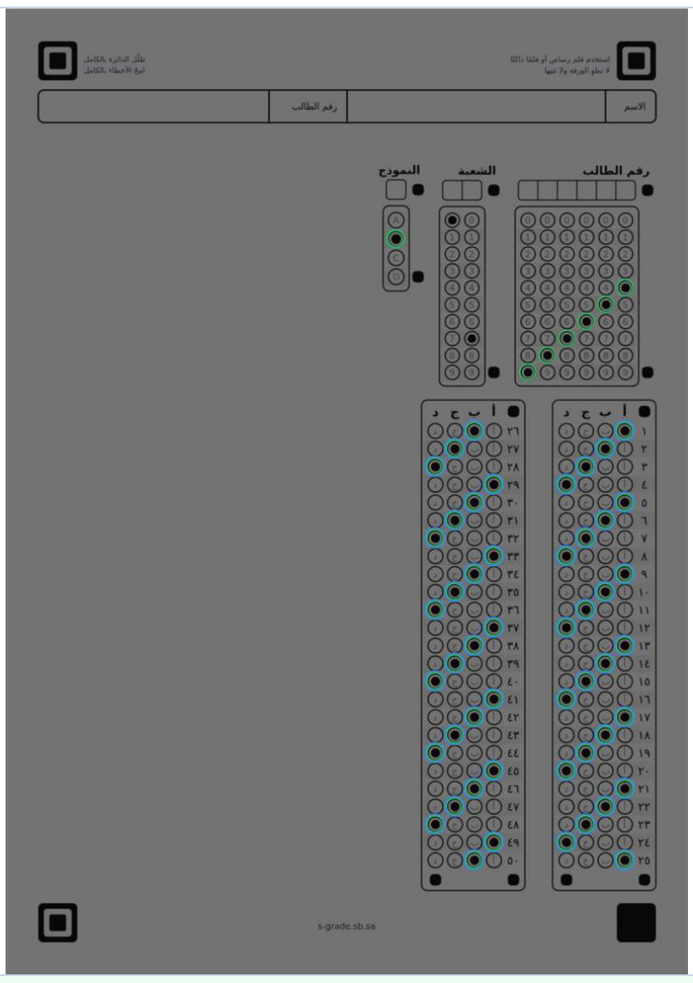
profile: `lighting_global_dark` · 574 passed · 0 failed



INPUT



WARPED



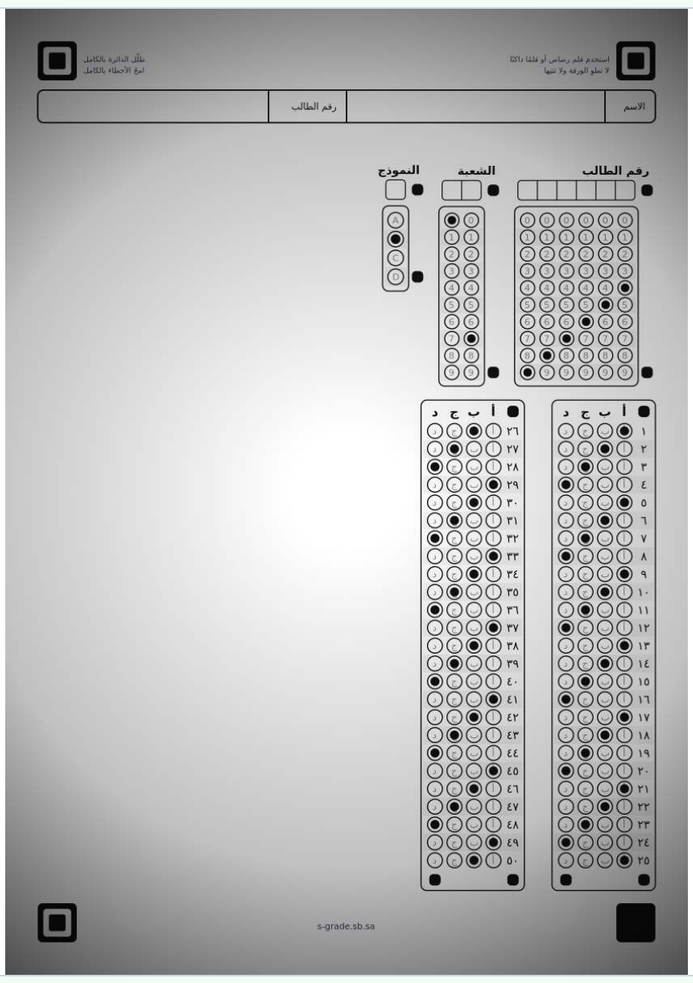
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

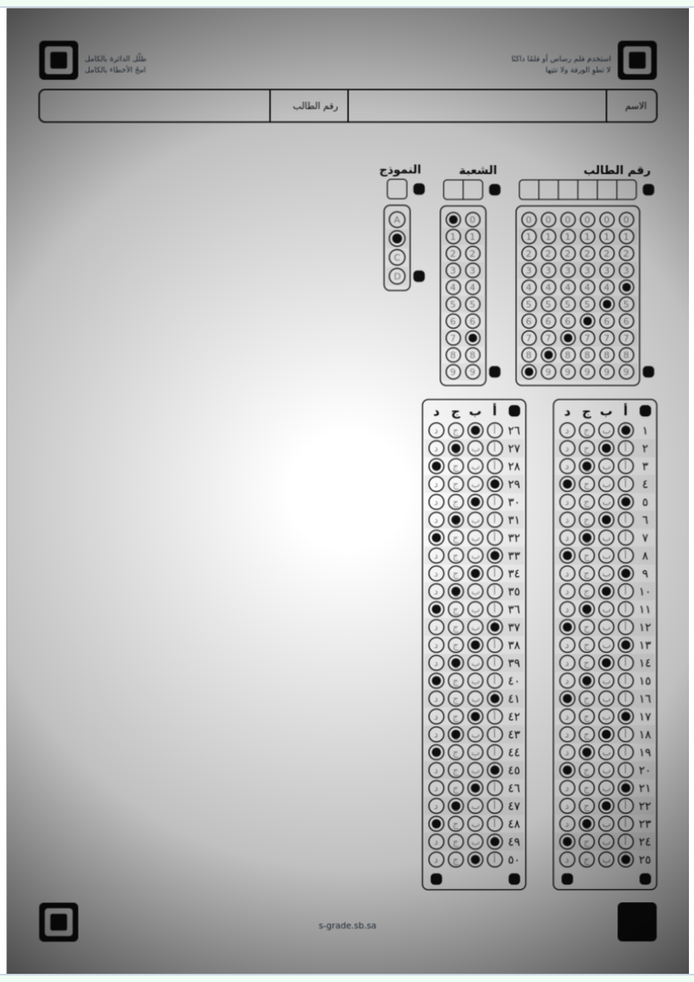
result.json

[AR] 50q · lighting vignette PASS

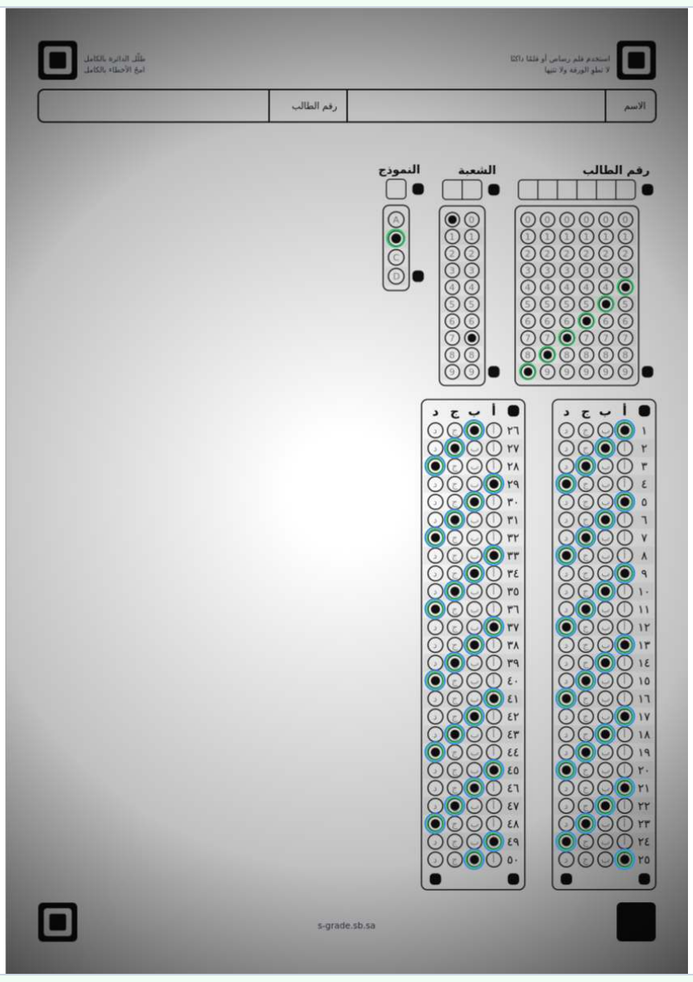
profile: `lighting_vignette` · 574 passed · 0 failed



INPUT



WARPED



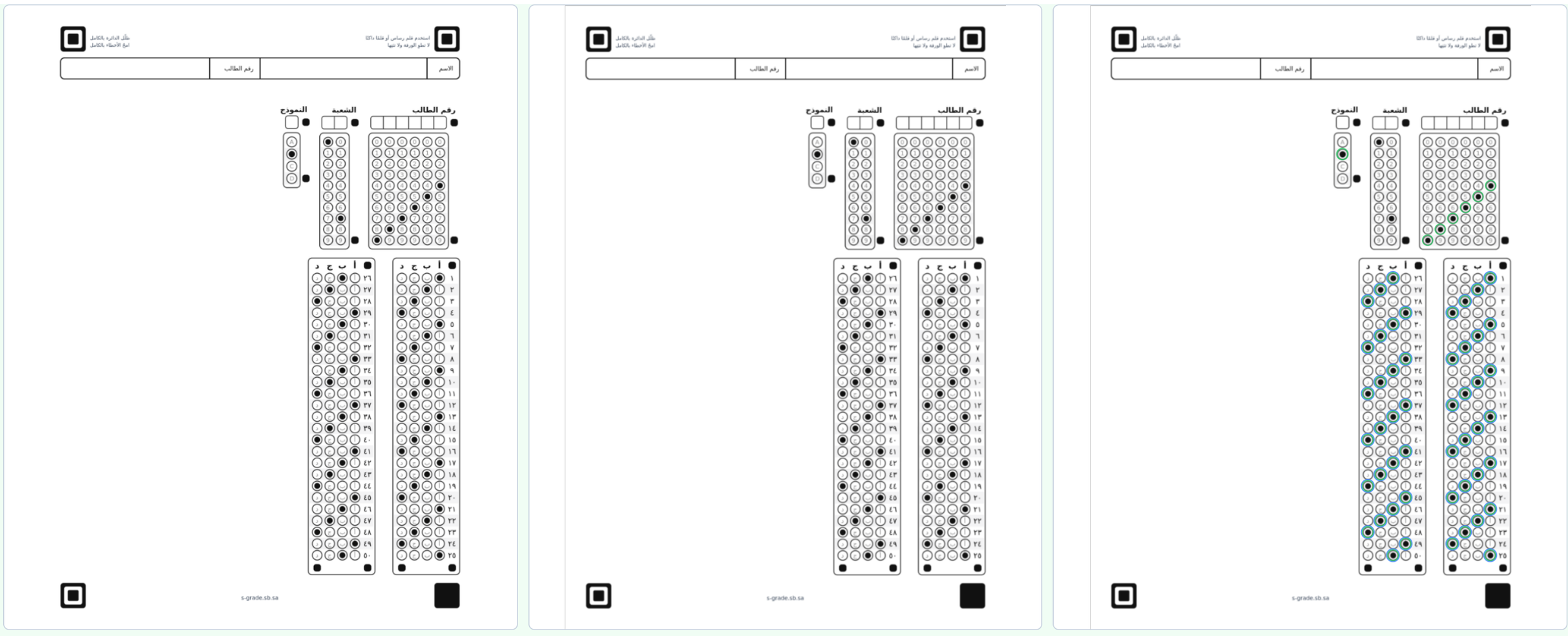
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · low res (700px) PASS

profile: `low_res` · 574 passed · 0 failed



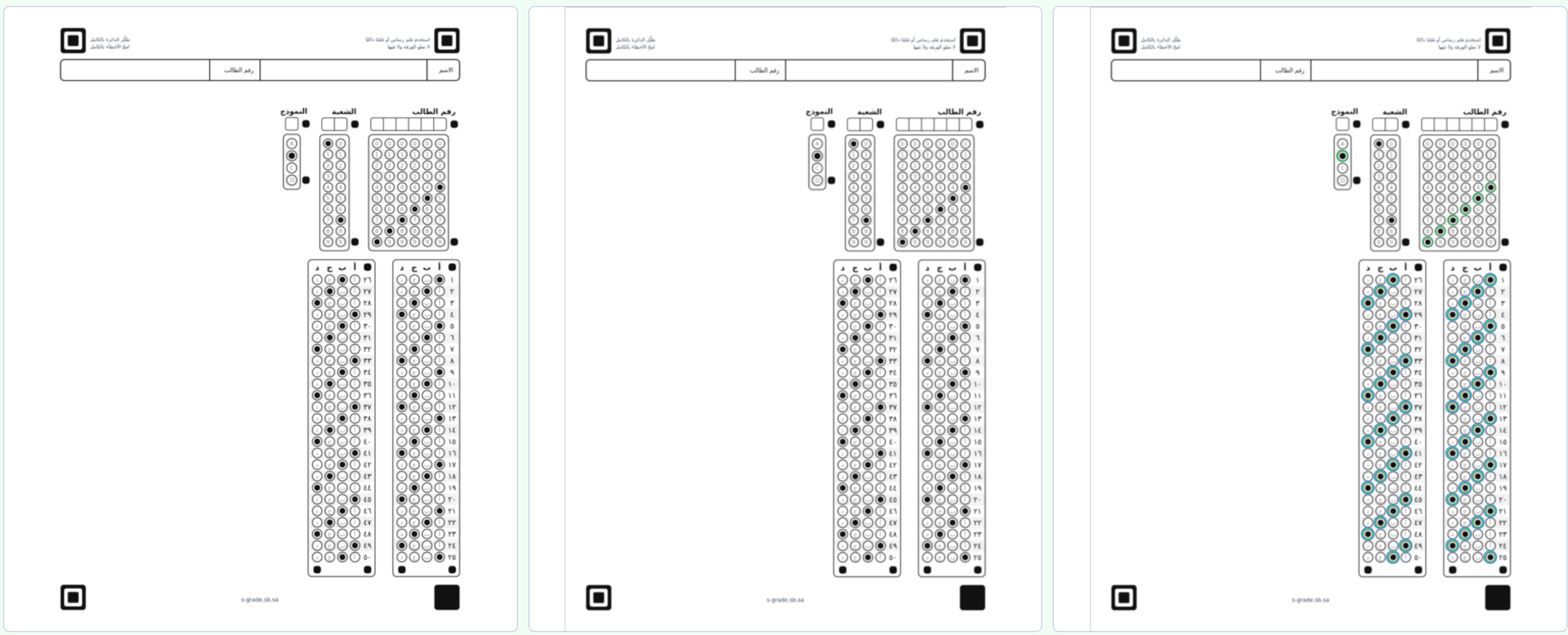
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · very low res (520px) PASS

profile: `very_low_res` · 574 passed · 0 failed



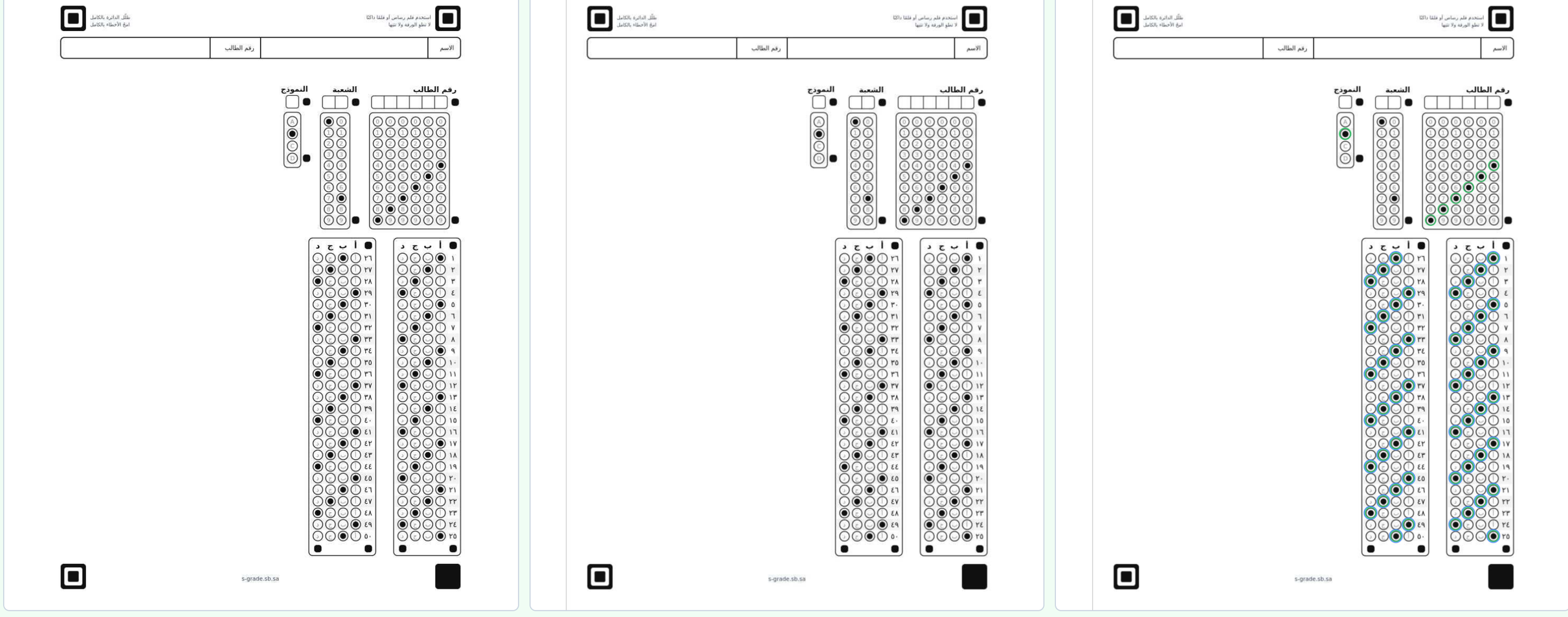
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · jpeg q50 PASS

profile: `jpeg_q50` · 574 passed · 0 failed



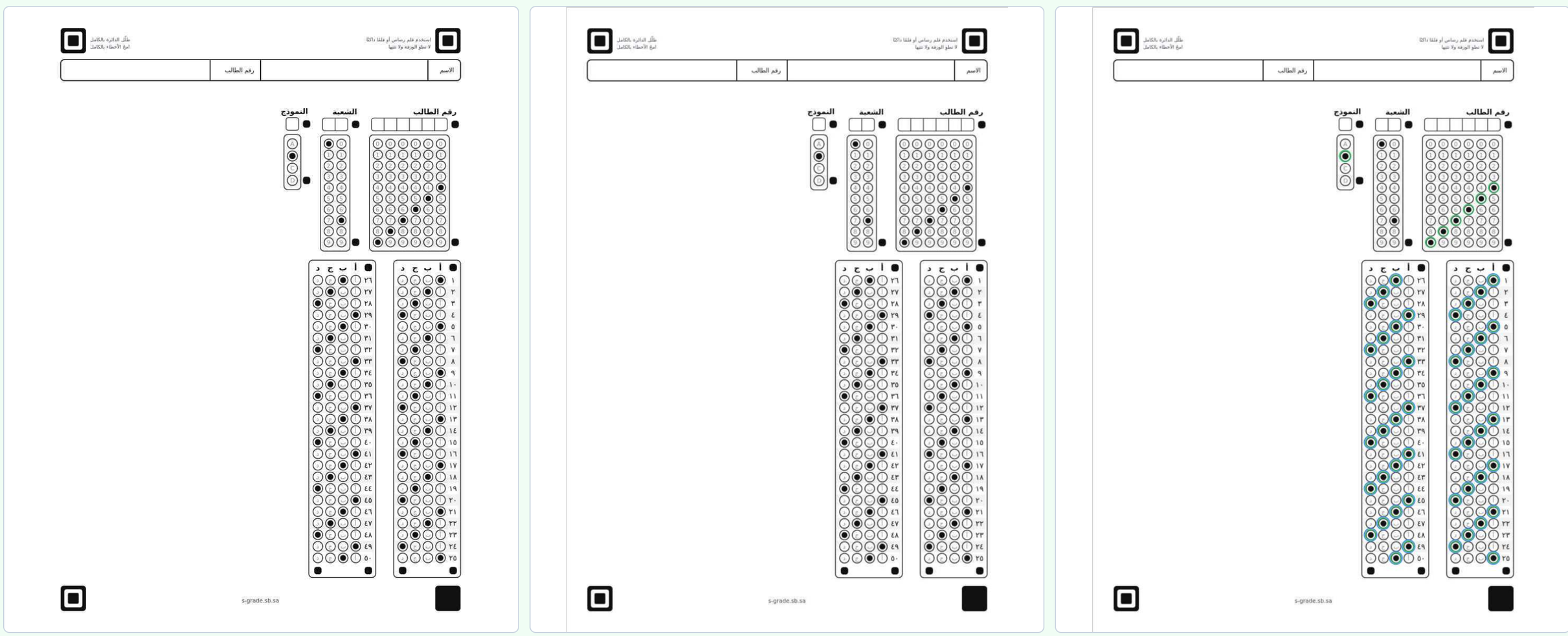
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · jpeg q30 PASS

profile: `jpeg_q30` · 574 passed · 0 failed



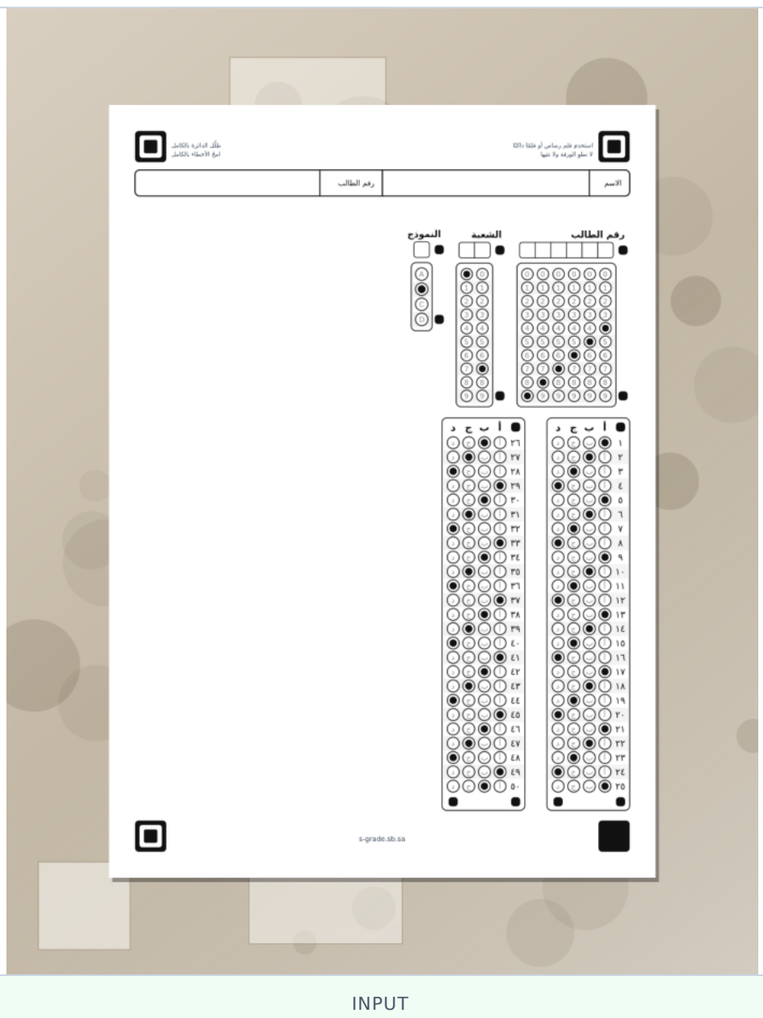
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

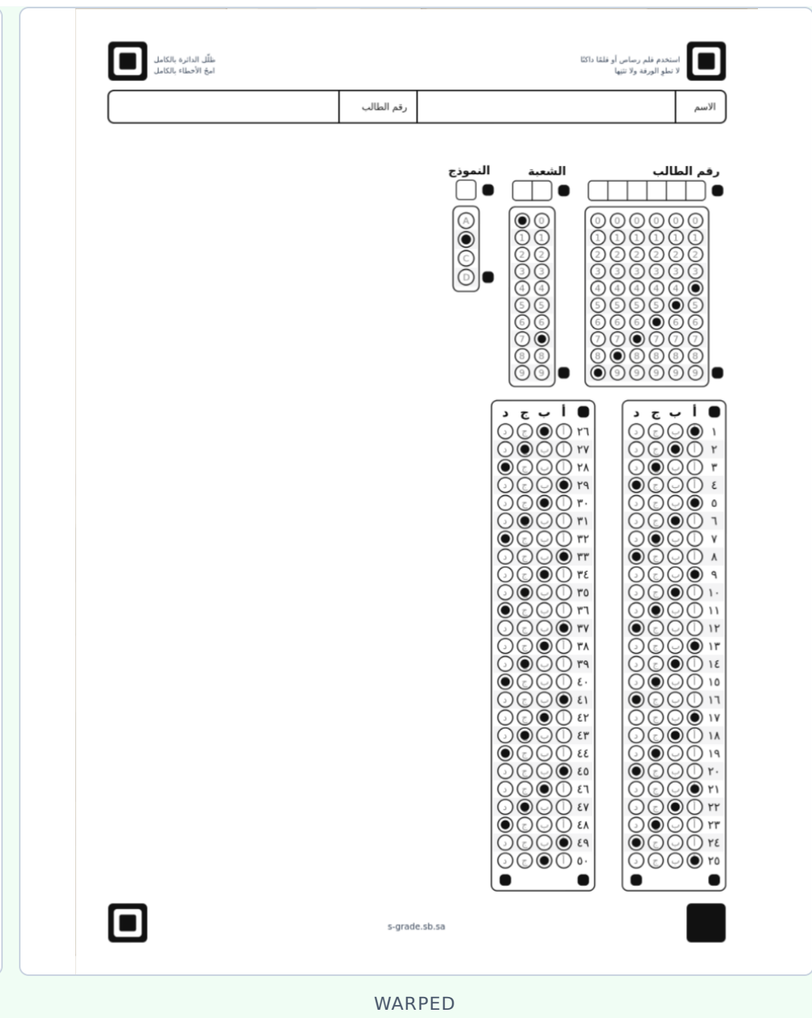
result.json

[AR] 50q · scene centered PASS

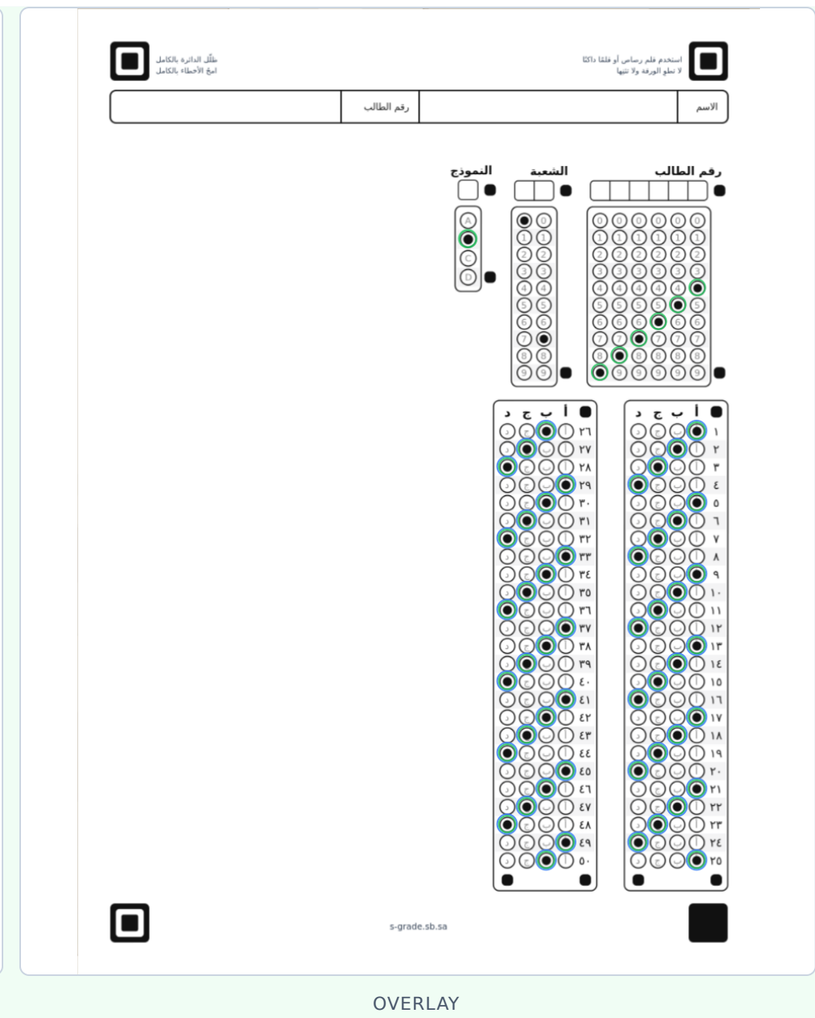
profile: `scene_center` · 574 passed · 0 failed



INPUT



WARPED



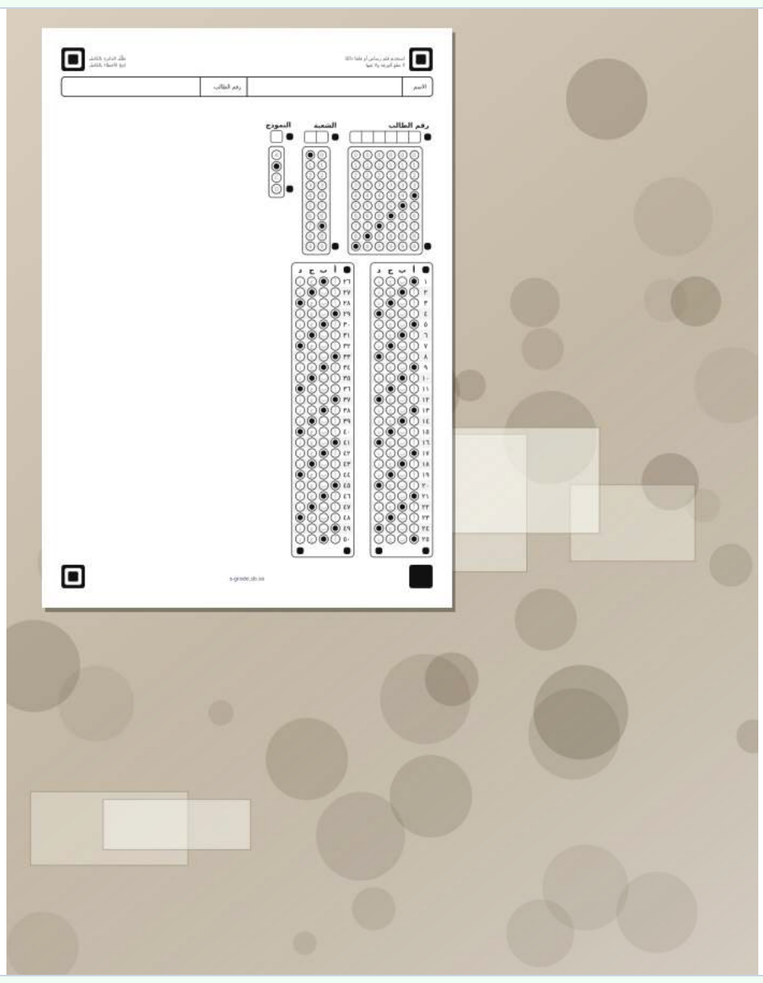
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

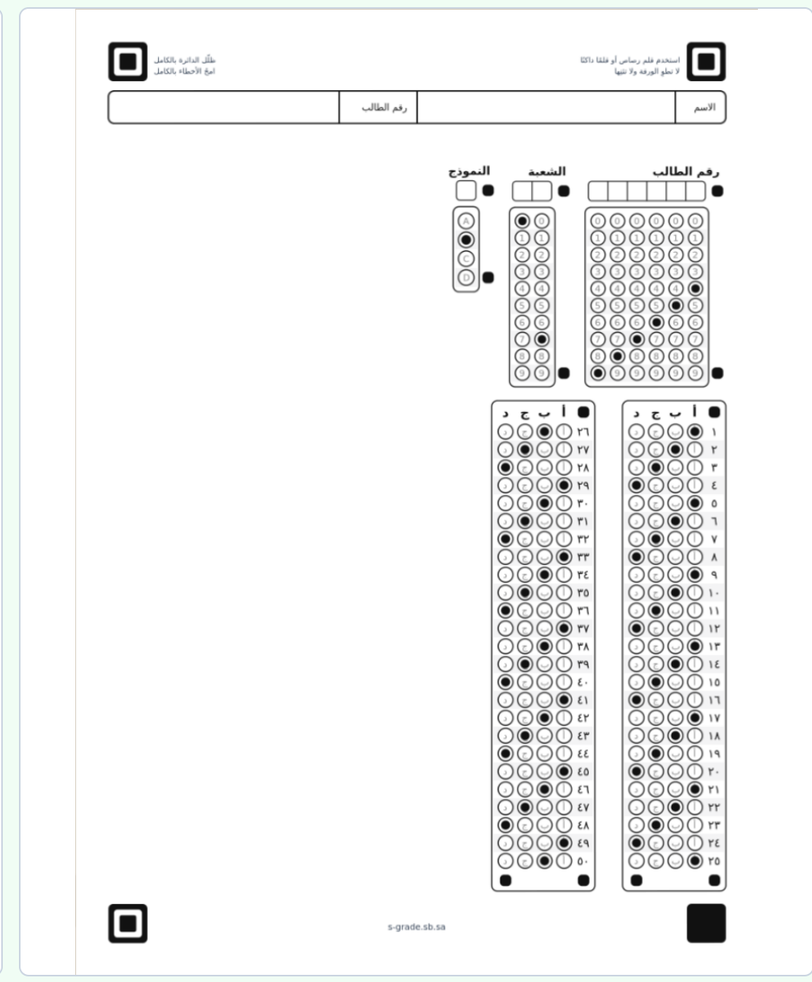
result.json

[AR] 50q · scene top-left PASS

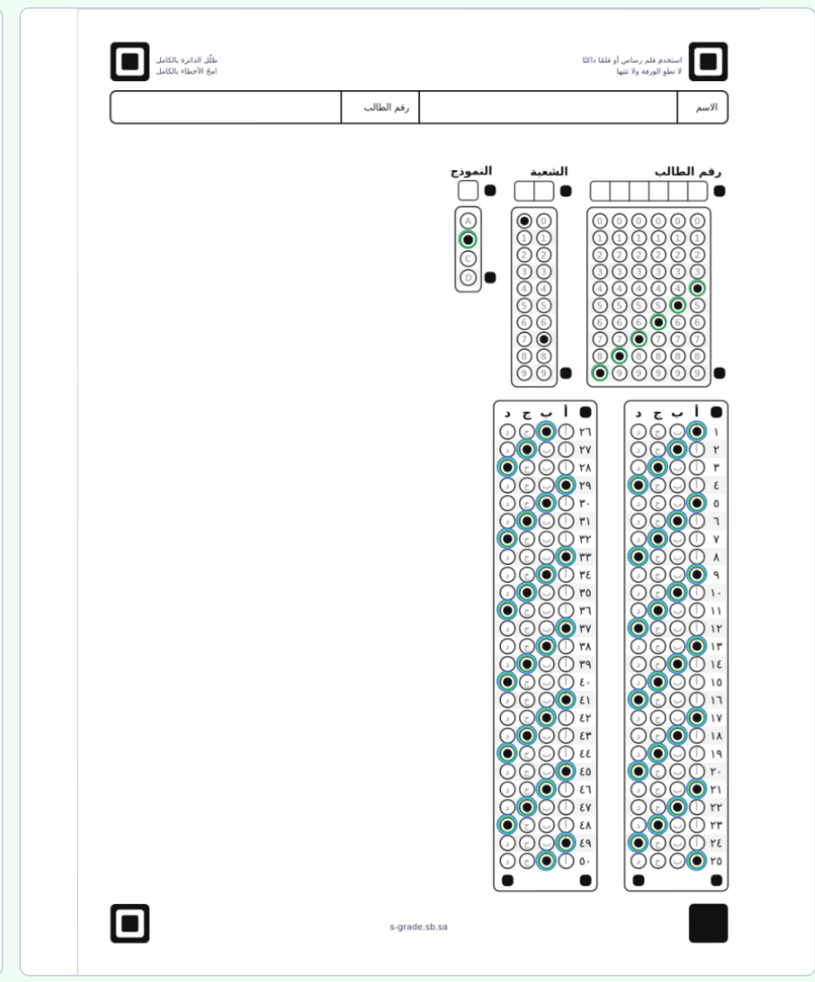
profile: `scene_top_left` · 574 passed · 0 failed



INPUT



WARPED



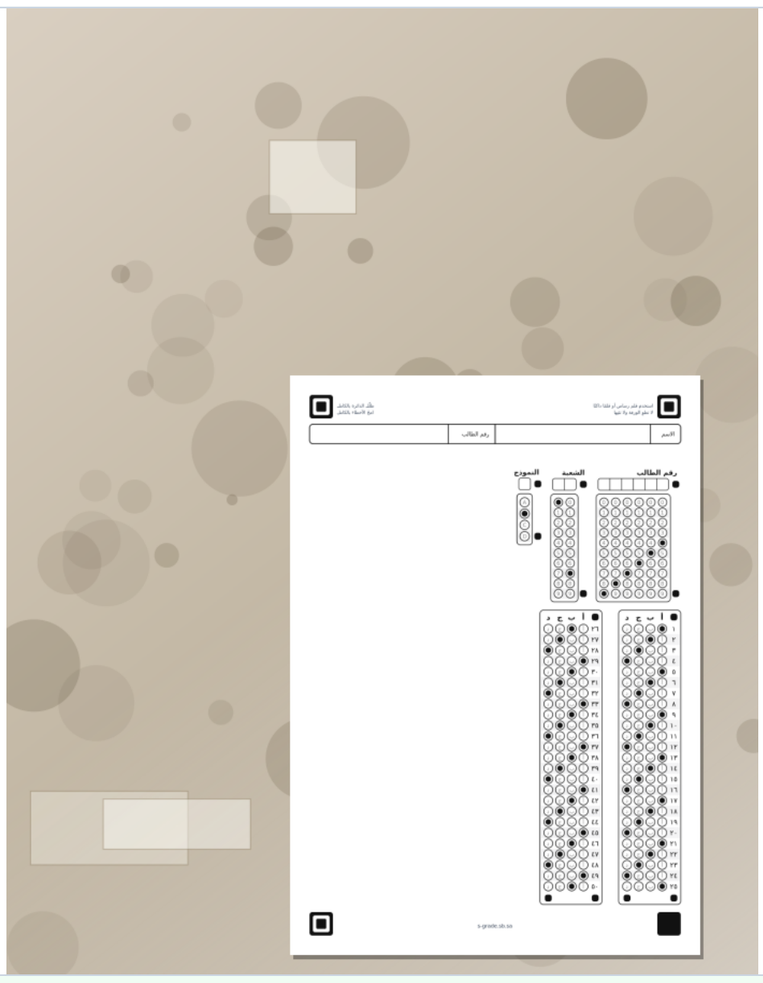
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

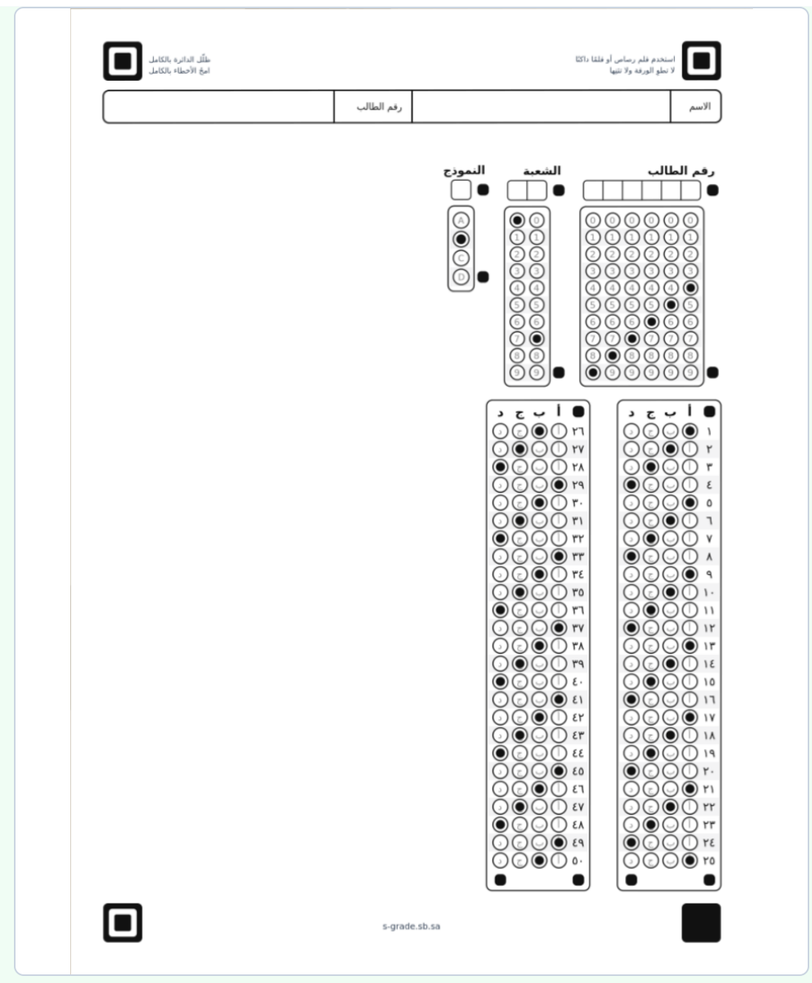
result.json

[AR] 50q · scene bottom-right PASS

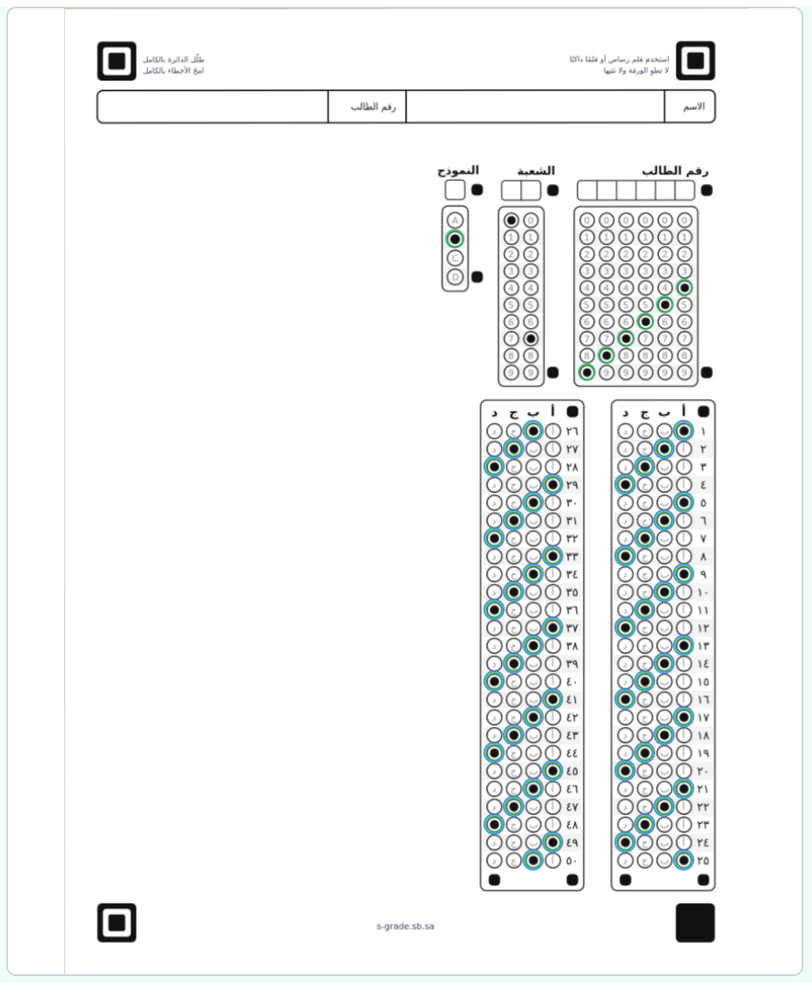
profile: `scene_bottom_right` · 574 passed · 0 failed



INPUT



WARPED



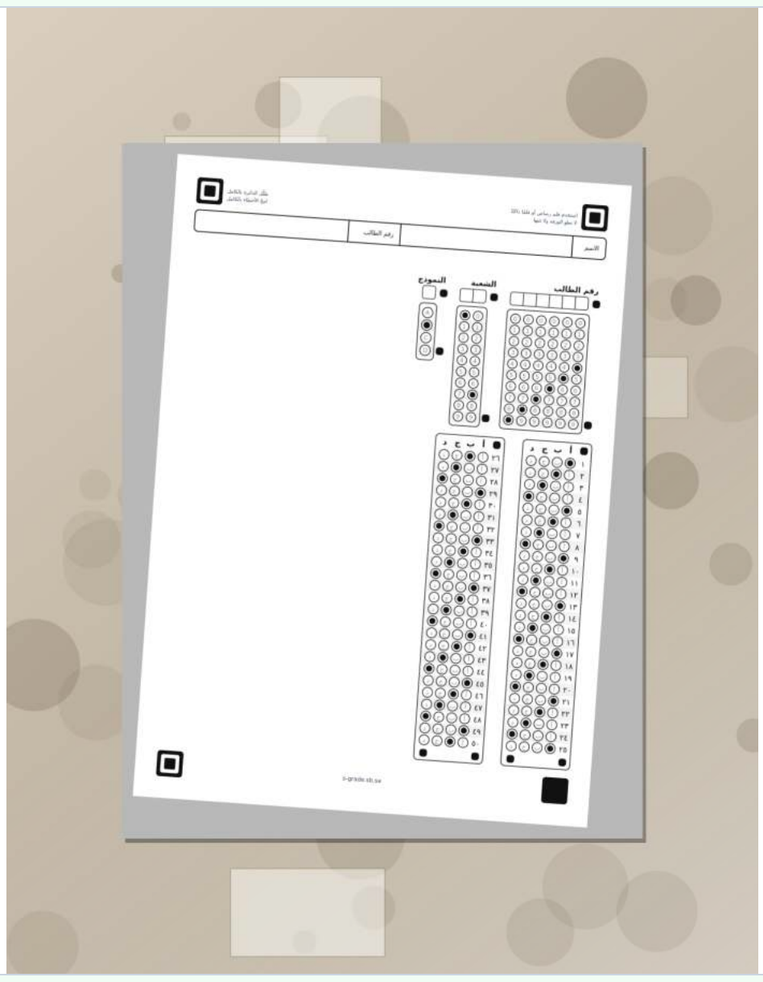
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

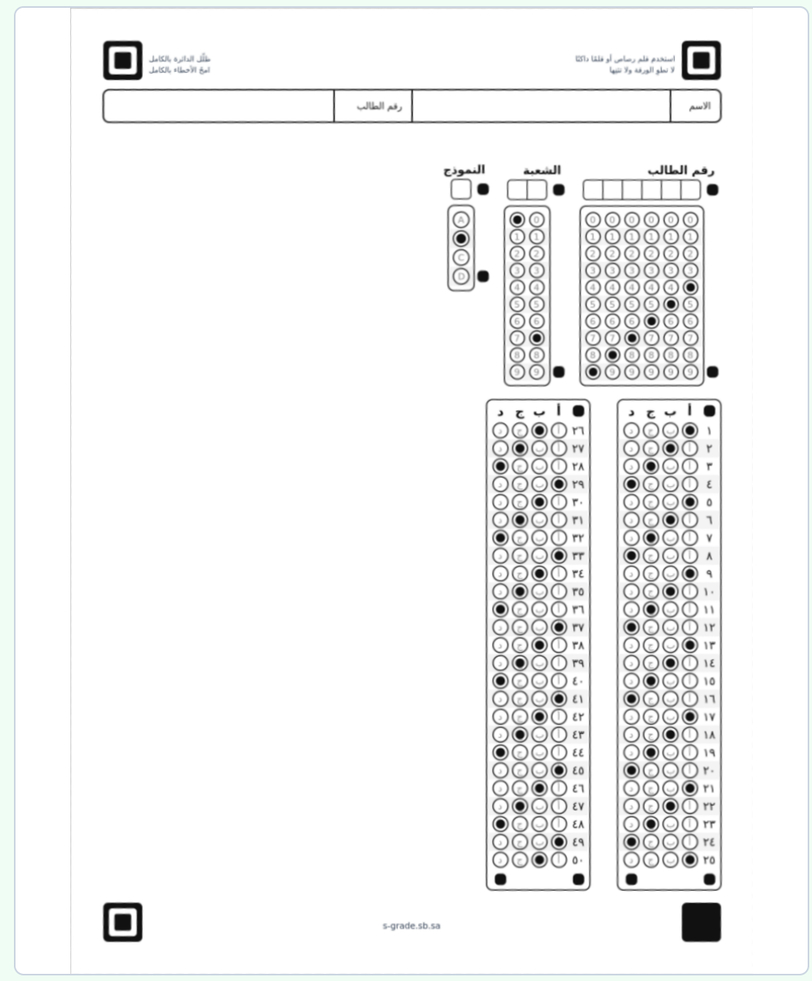
result.json

[AR] 50q · scene rotated in frame PASS

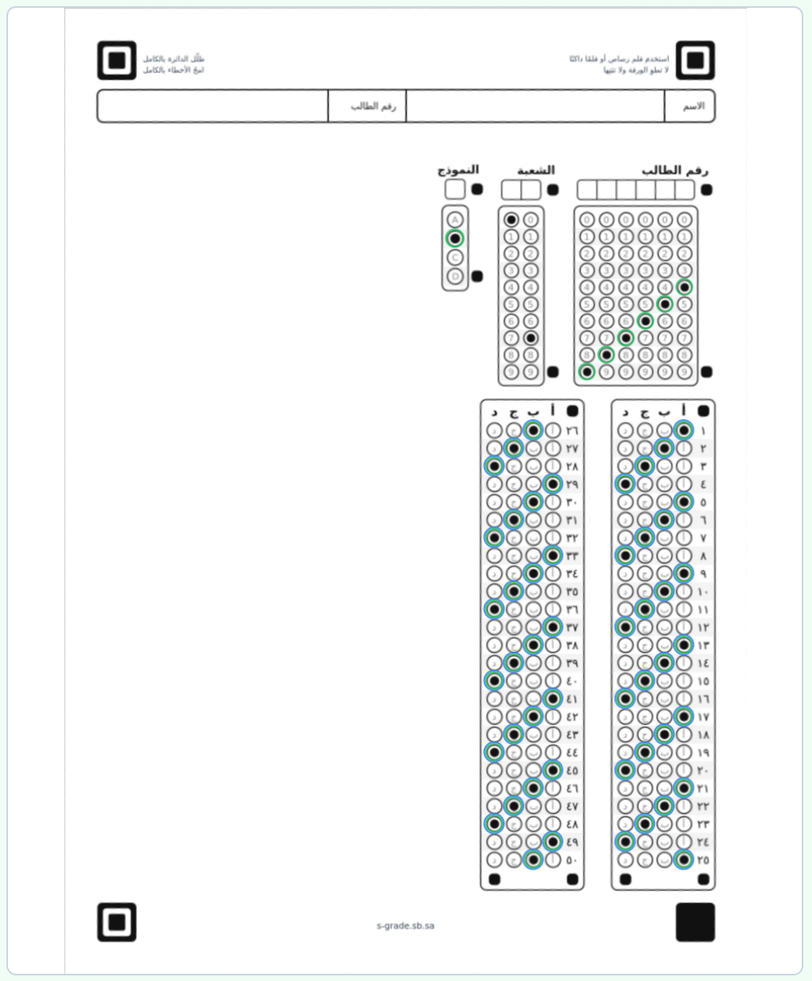
profile: `scene_rotated` · 574 passed · 0 failed



INPUT



WARPED



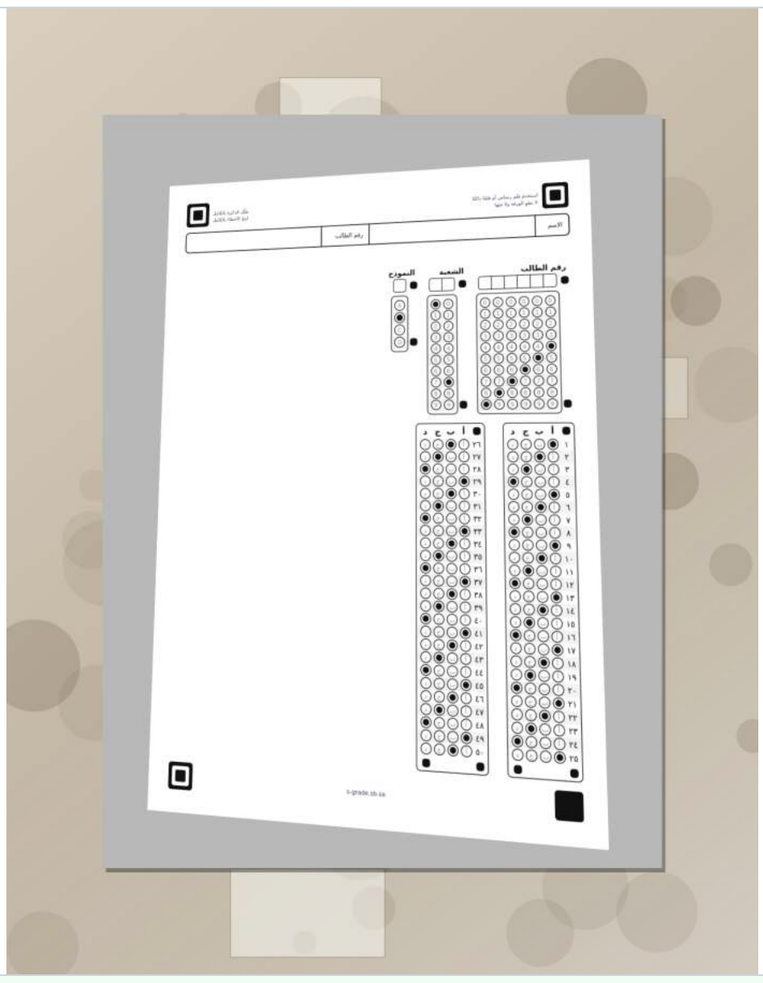
OVERLAY

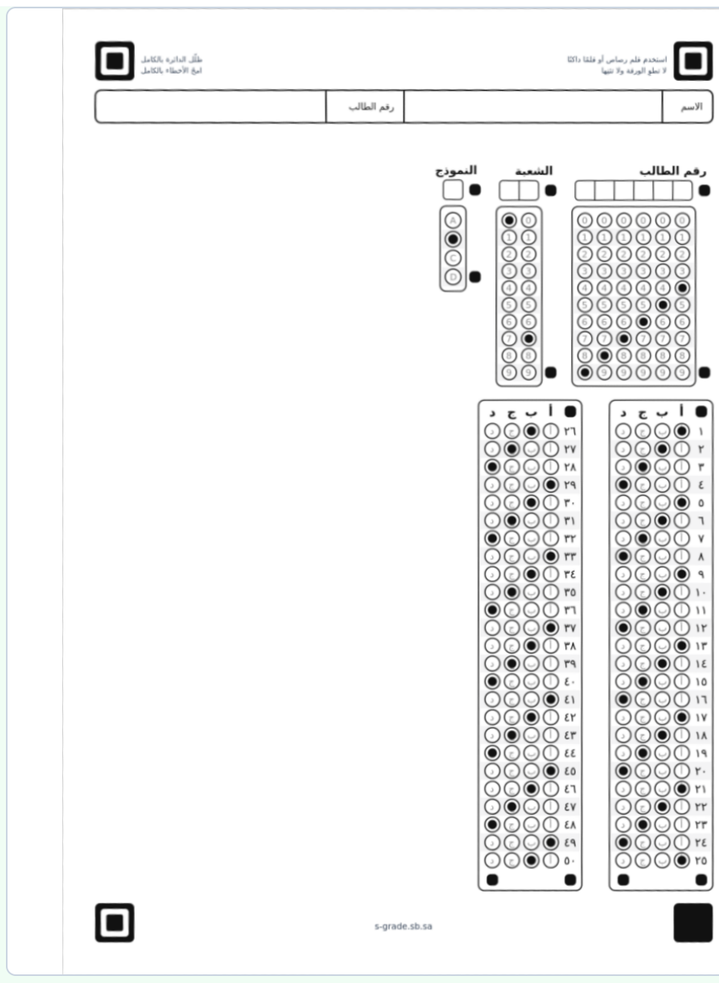
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

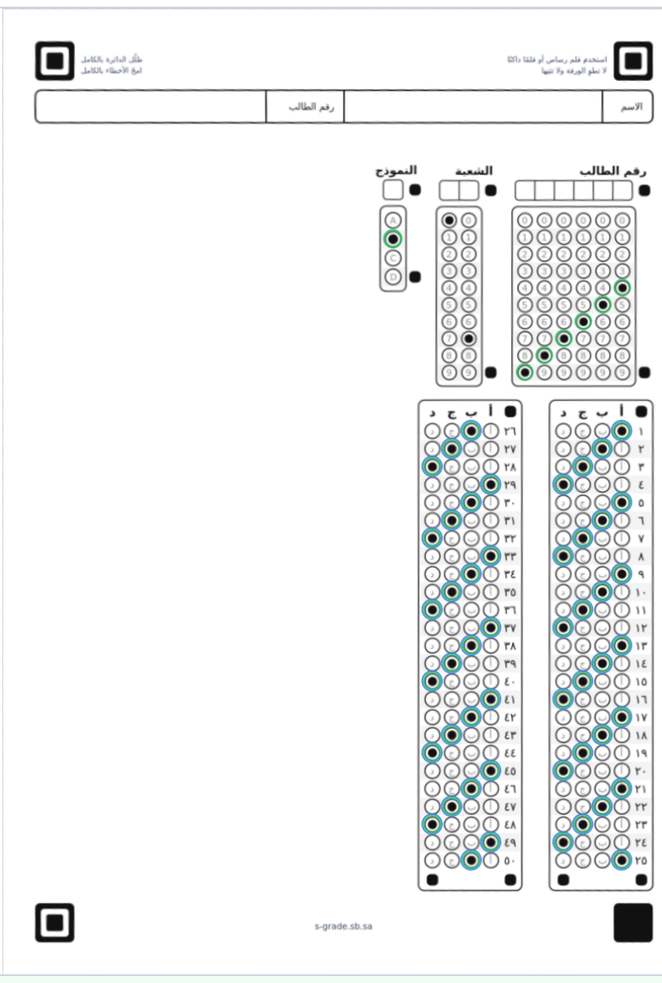
result.json

[AR] 50q · scene perspective PASS

profile: `scene_perspective` · 574 passed · 0 failed







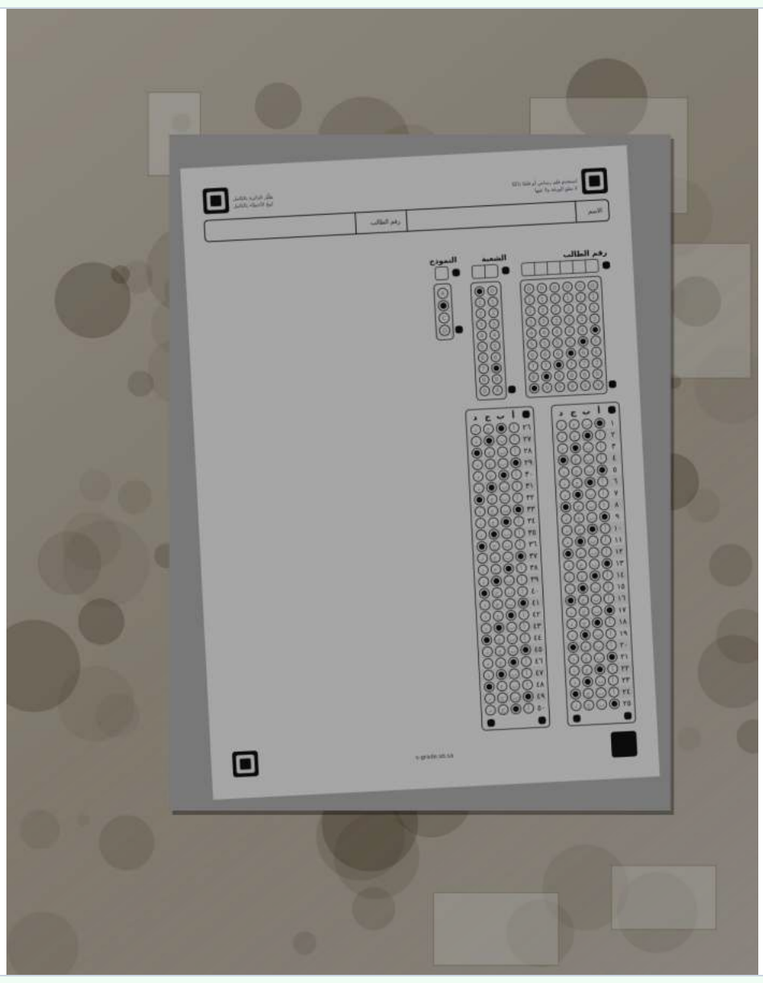
INPUT | WARPED | OVERLAY

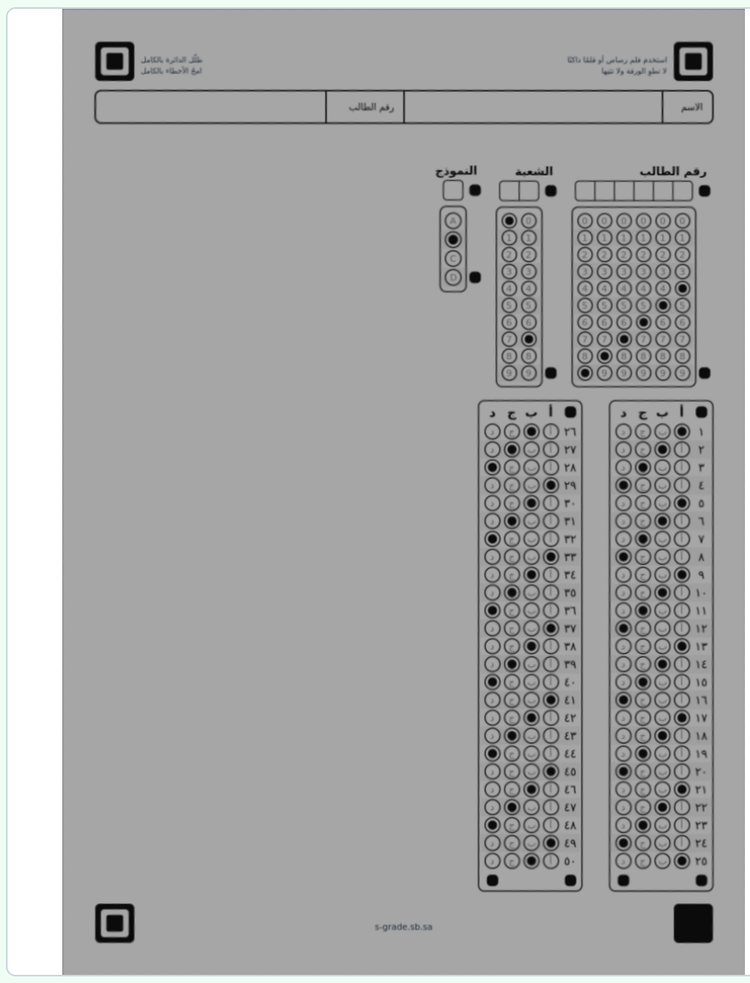
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

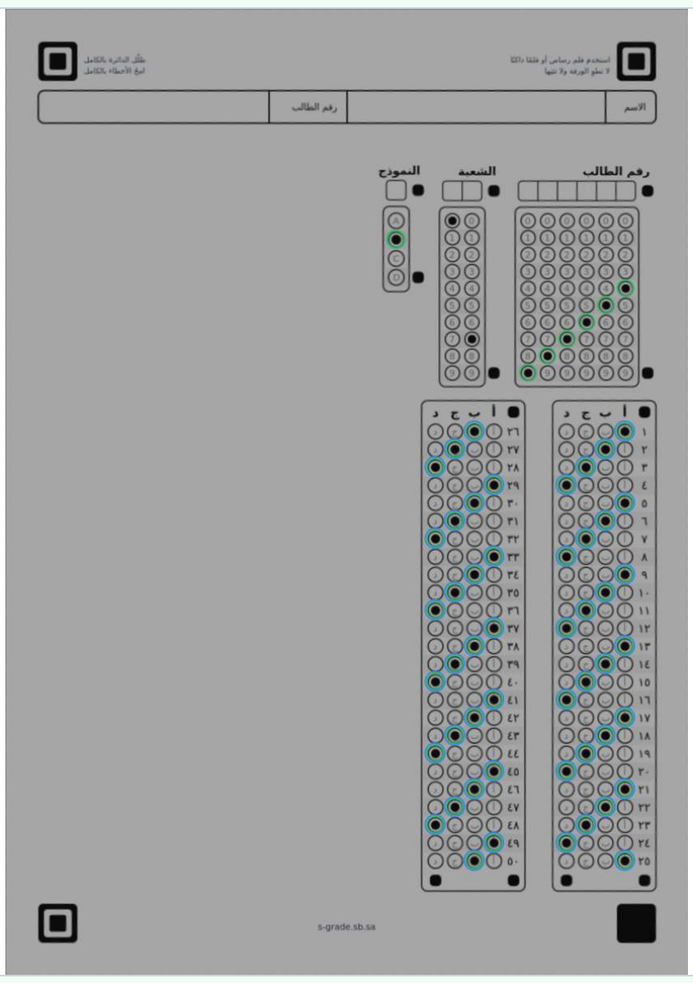
result.json

[AR] 50q · scene cluttered dark PASS

profile: `scene_cluttered_dark` · 574 passed · 0 failed







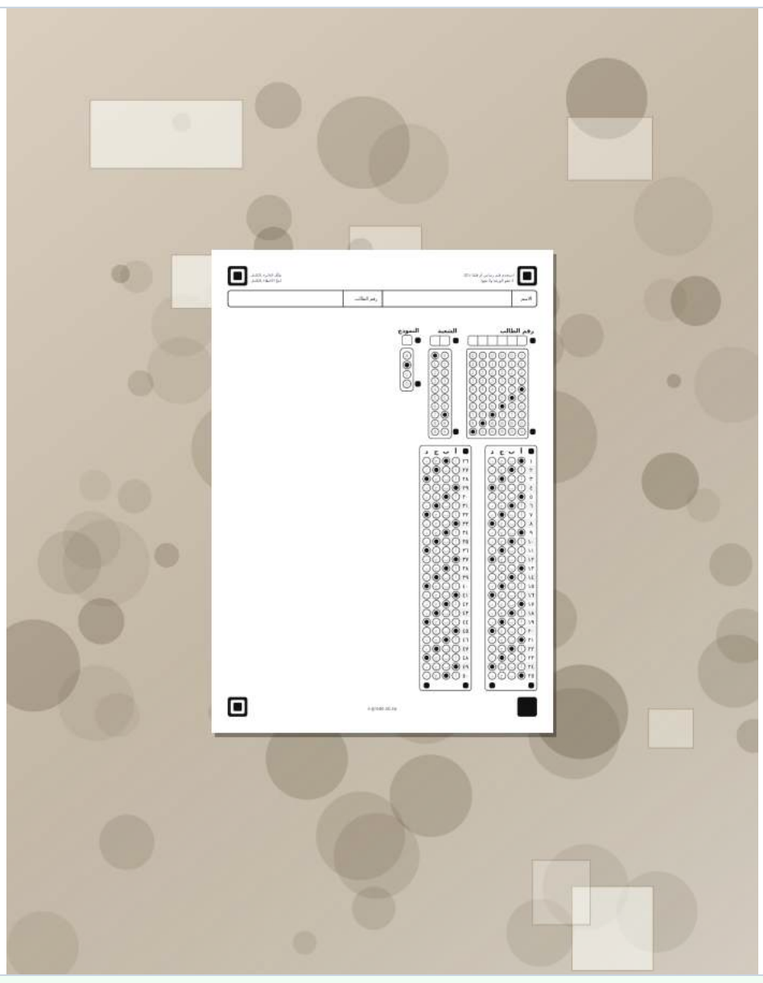
INPUT | WARPED | OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

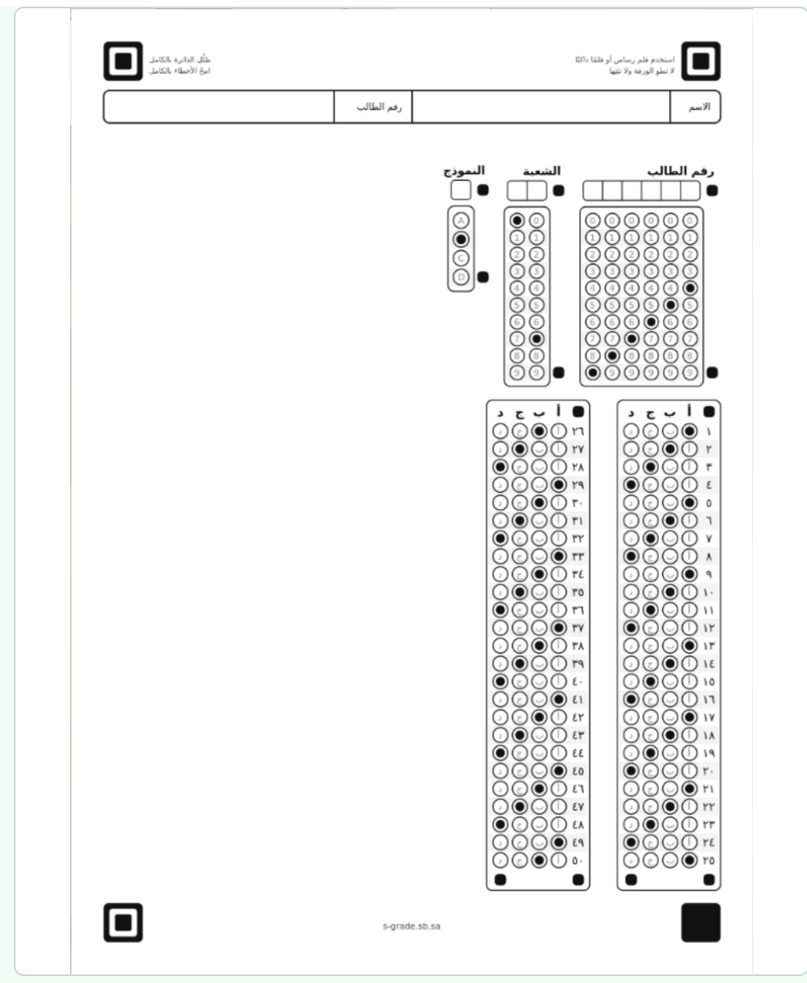
result.json

[AR] 50q · scene small sheet PASS

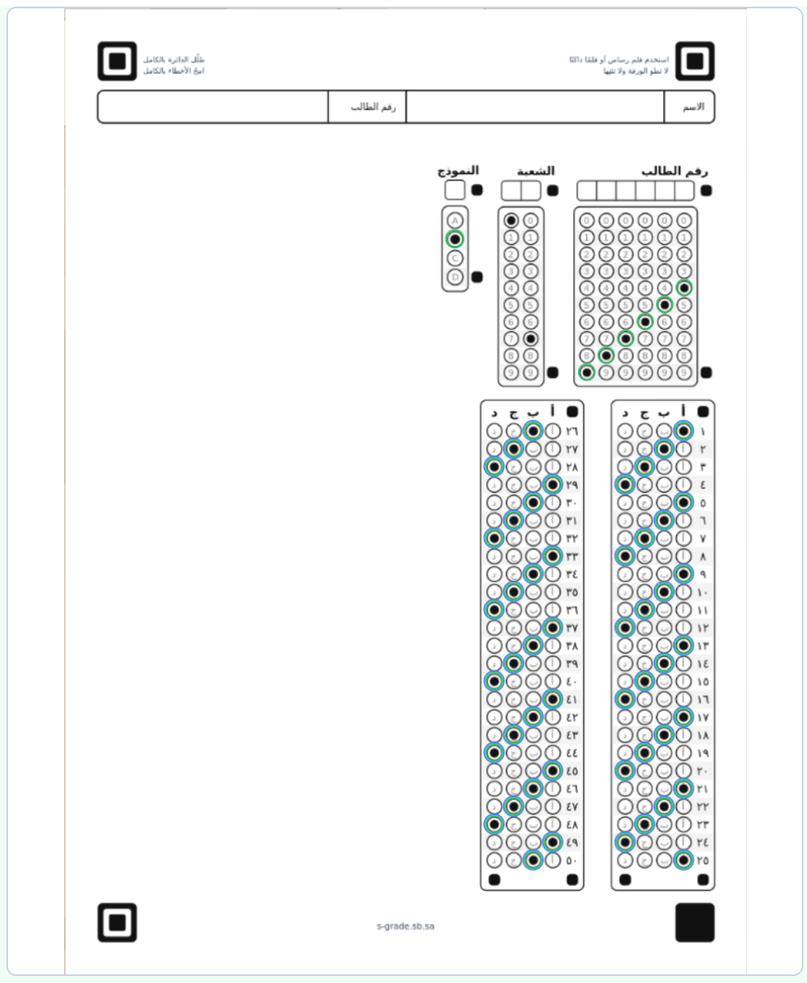
profile: `scene_small_centered` · 574 passed · 0 failed



INPUT



WARPED



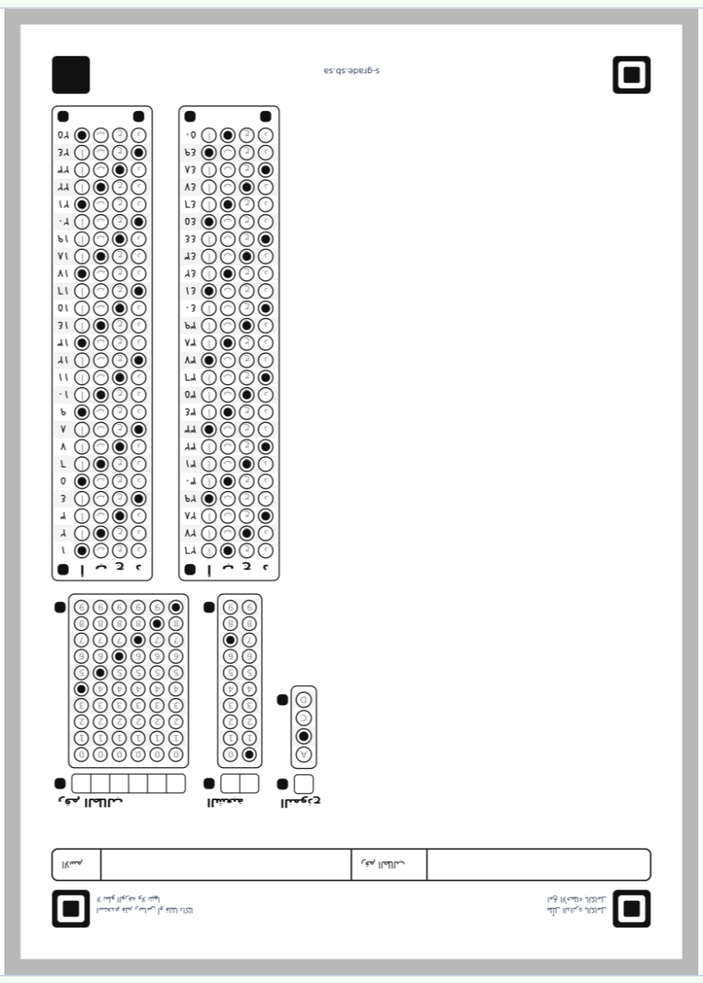
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

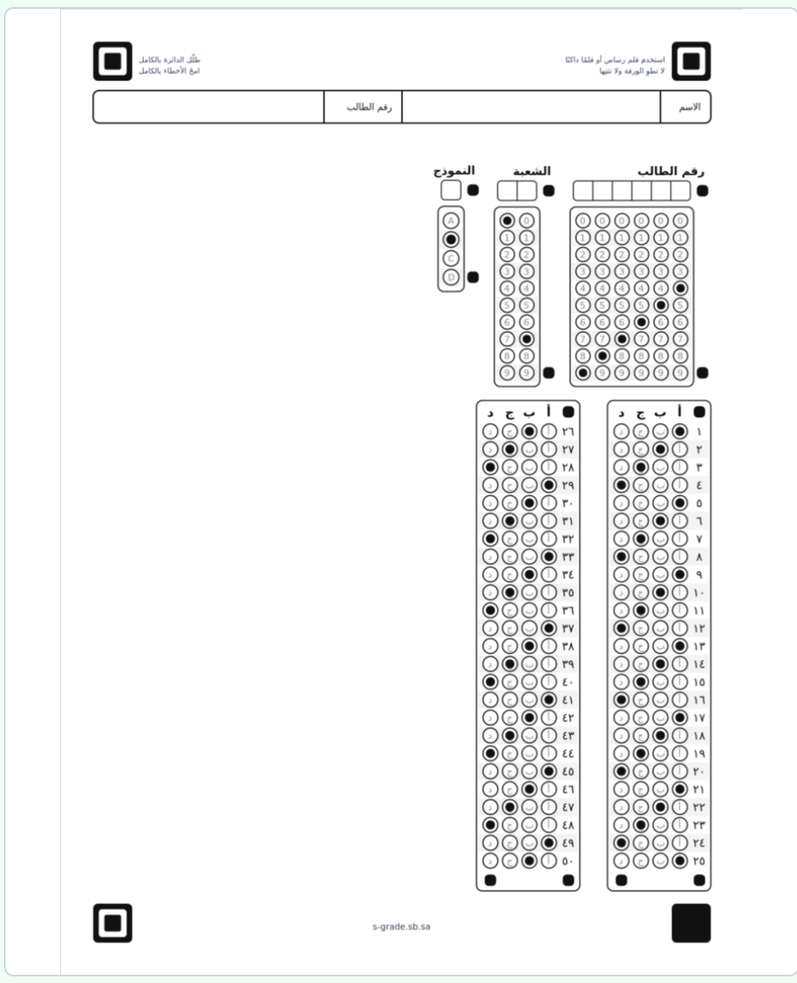
result.json

[AR] 50q · upside down (180°) PASS

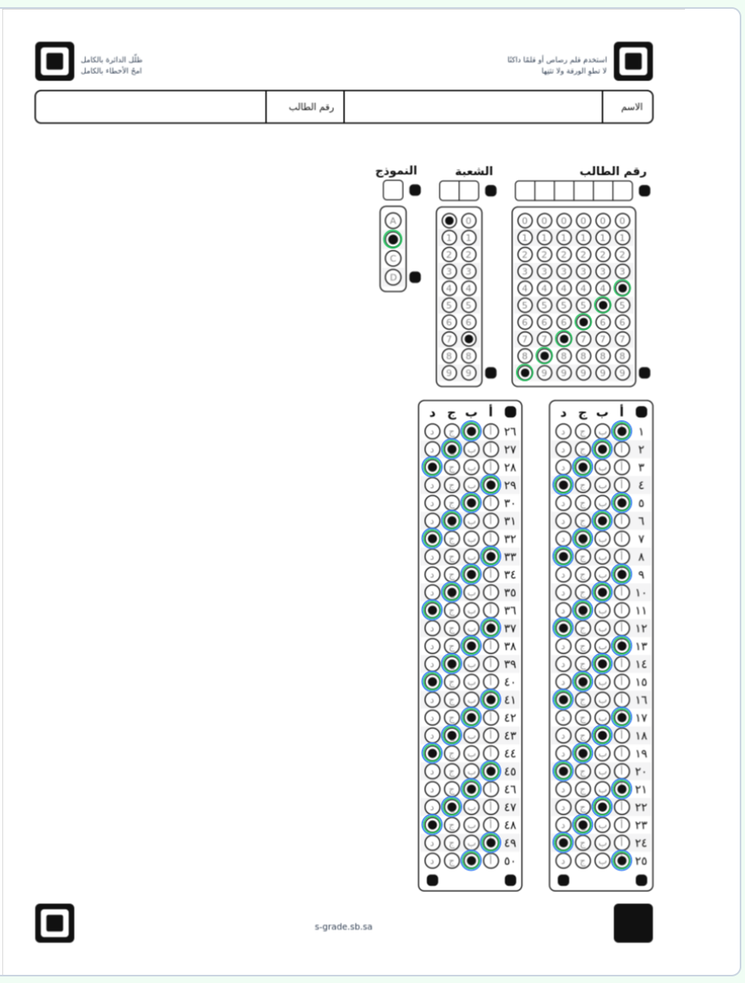
profile: `rotated_180deg` · 574 passed · 0 failed



INPUT



WARPED



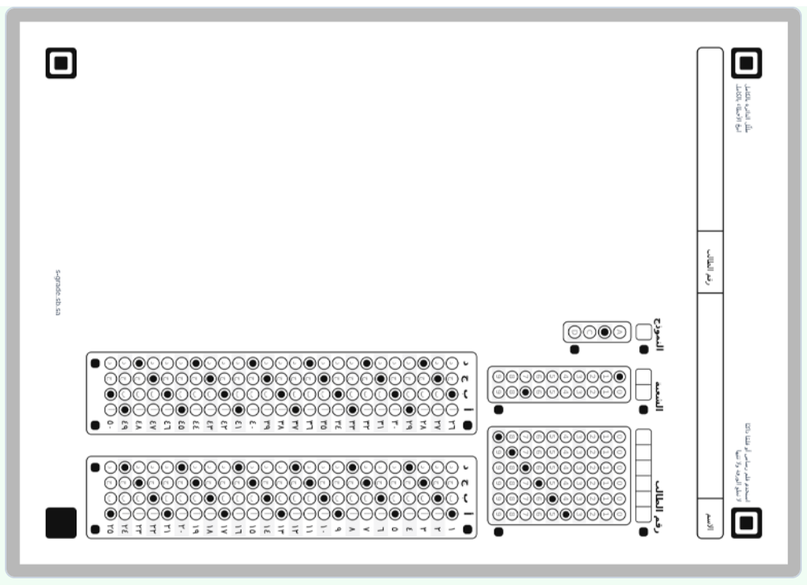
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

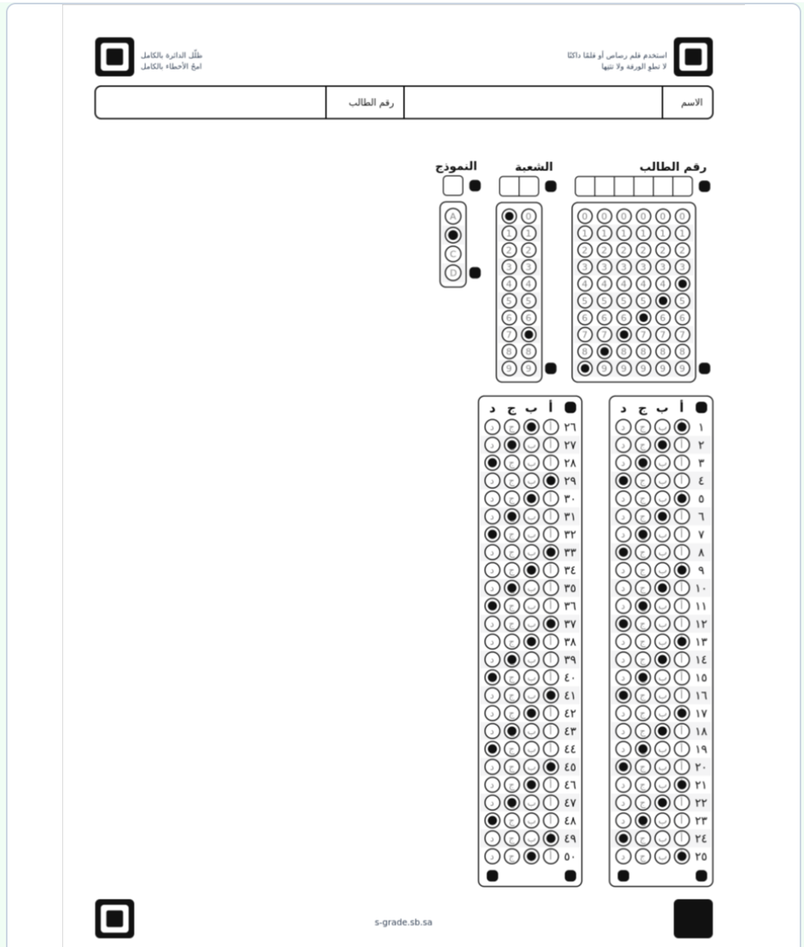
result.json

[AR] 50q · sideways right (+90°) PASS

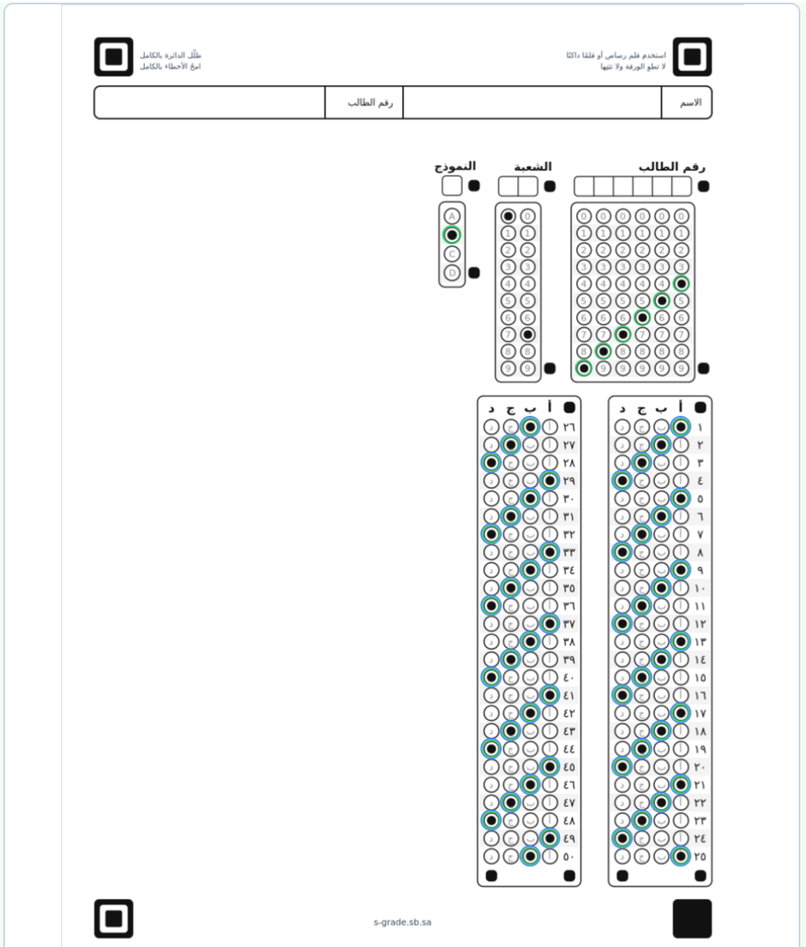
profile: `rotated_90deg` · 574 passed · 0 failed



INPUT



WARPED



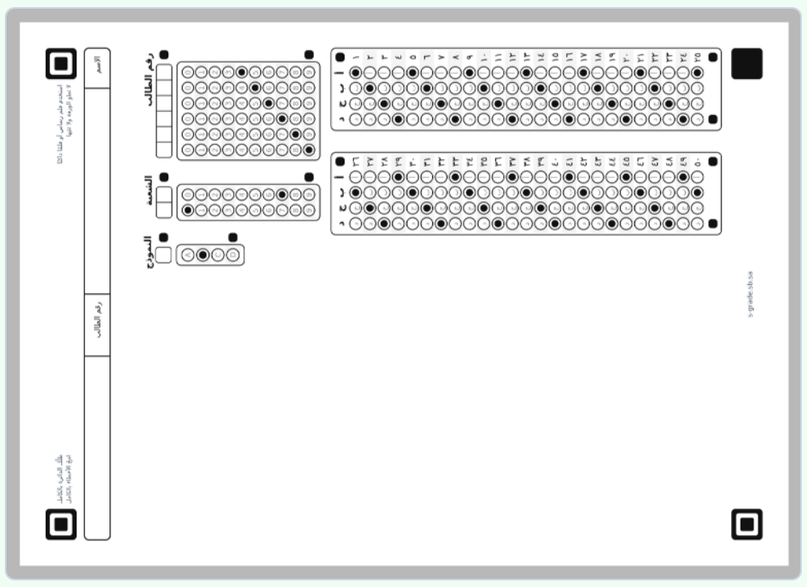
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

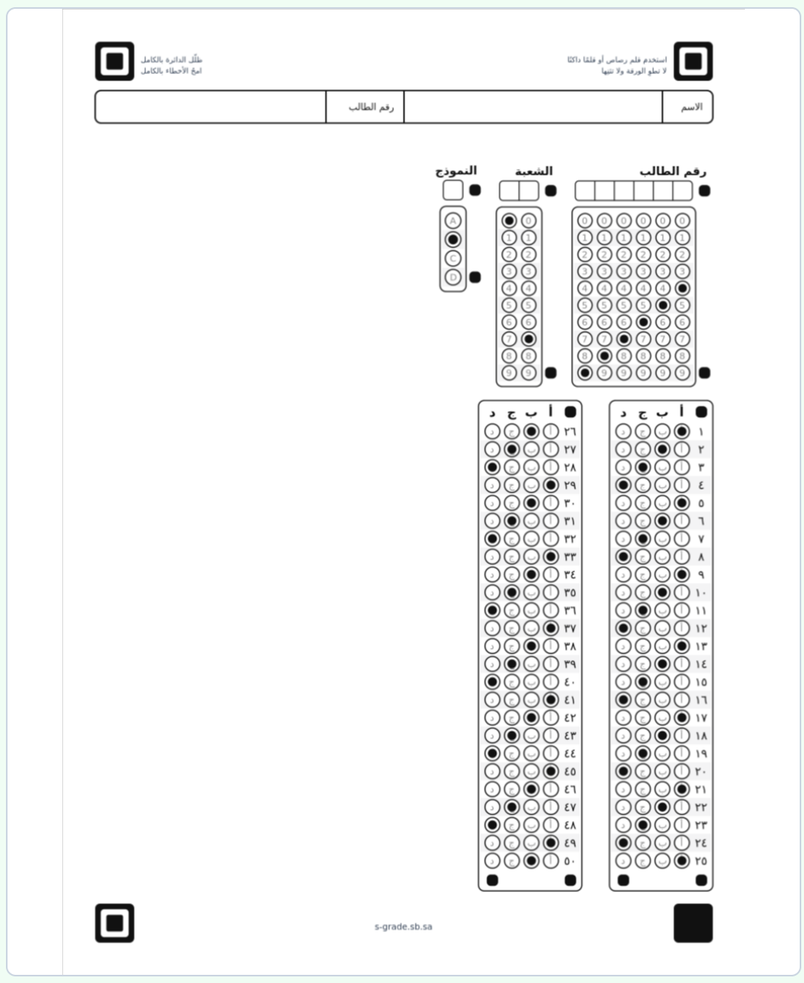
result.json

[AR] 50q · sideways left (-90°) PASS

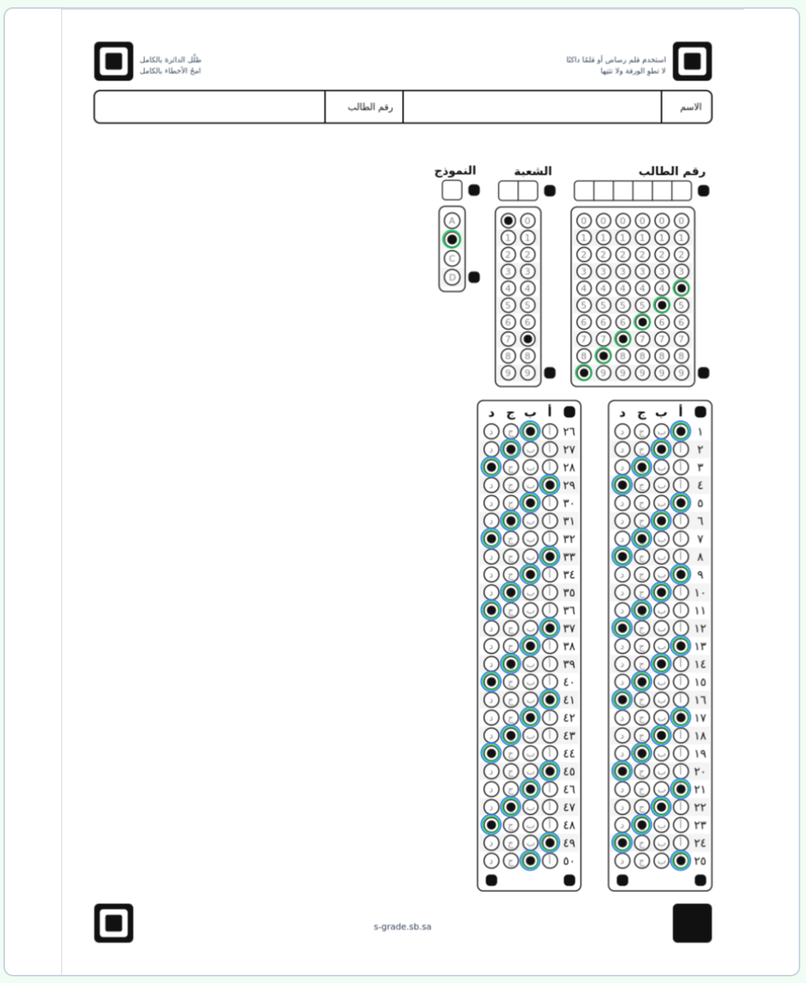
profile: `rotated_neg90deg` · 574 passed · 0 failed



INPUT



WARPED



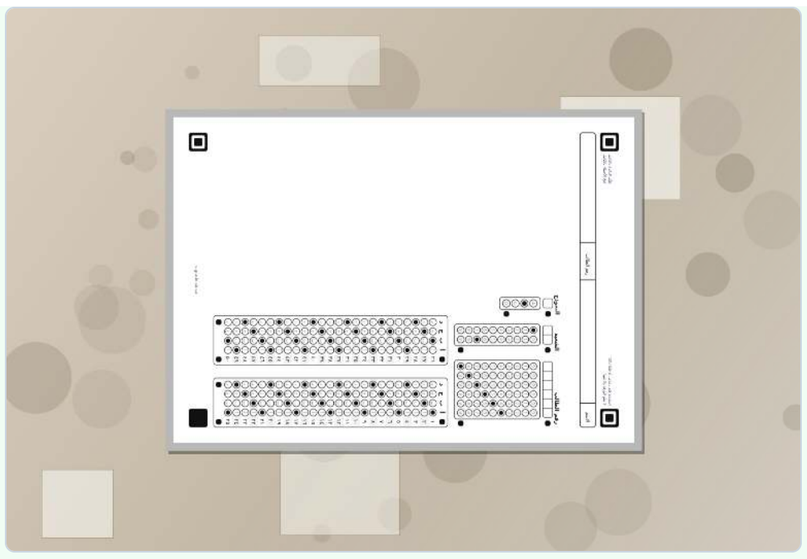
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

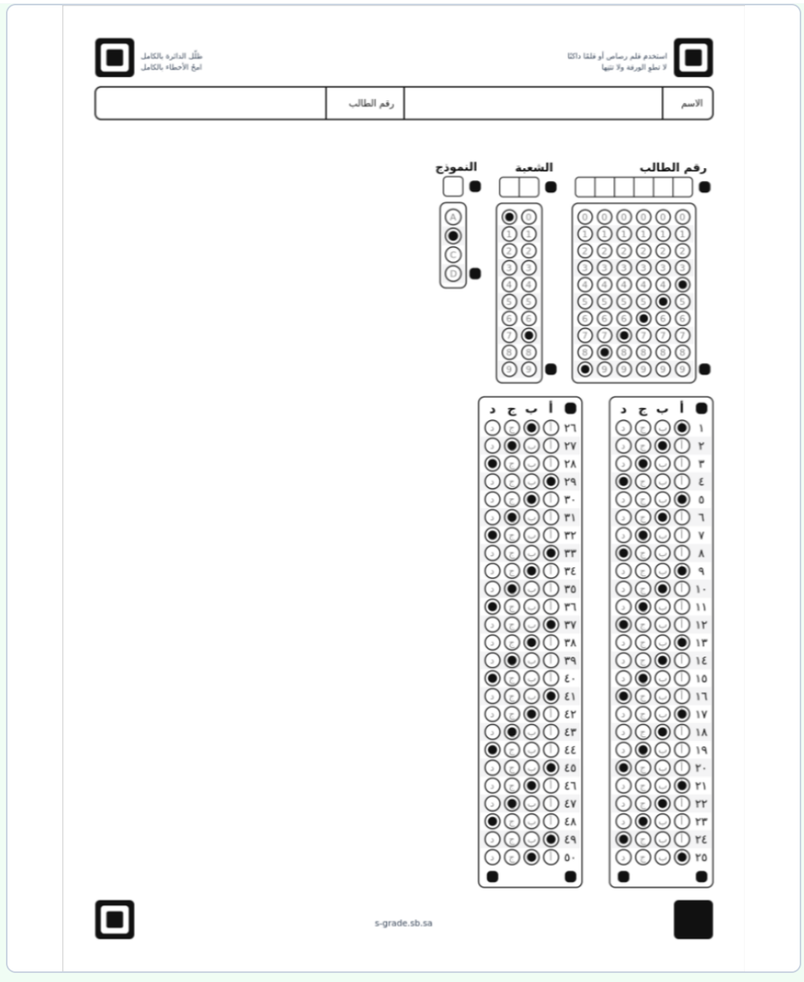
result.json

[AR] 50q · landscape sheet in landscape frame PASS

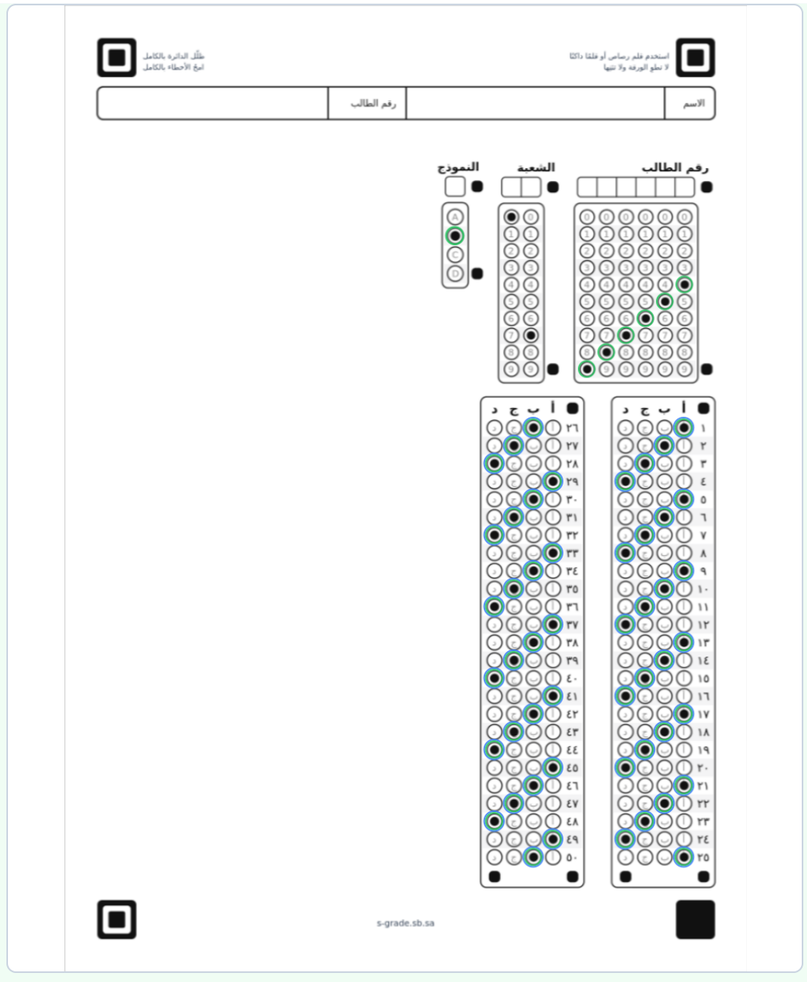
profile: `scene_landscape_frame` · 574 passed · 0 failed



INPUT



WARPED



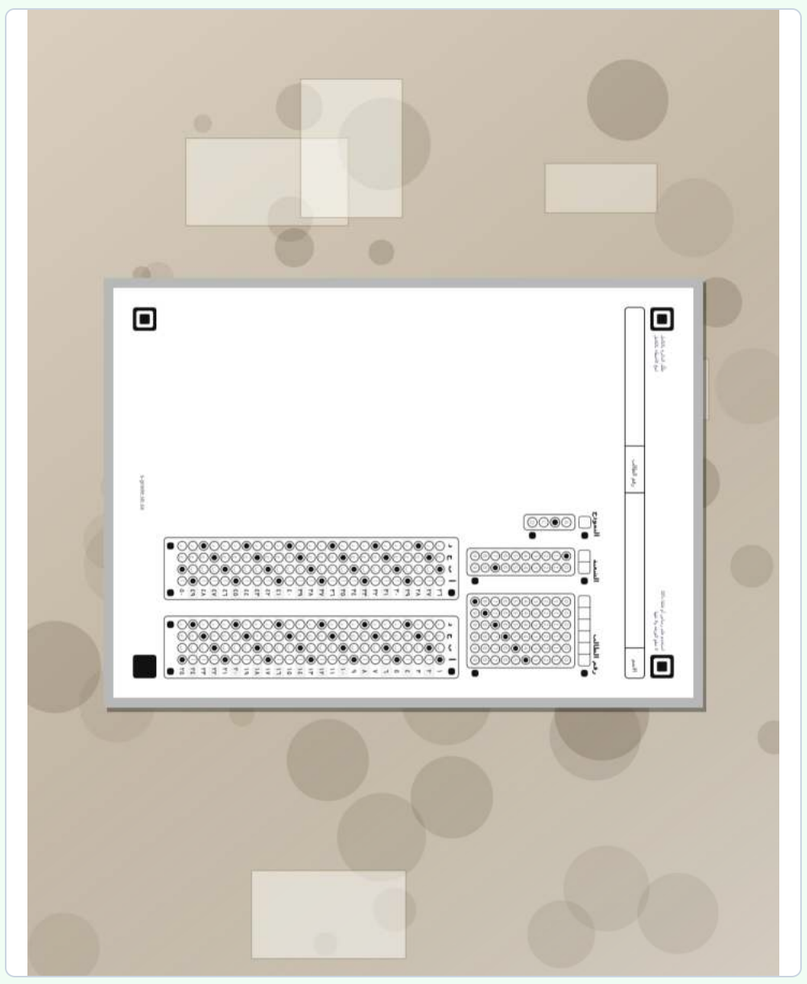
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

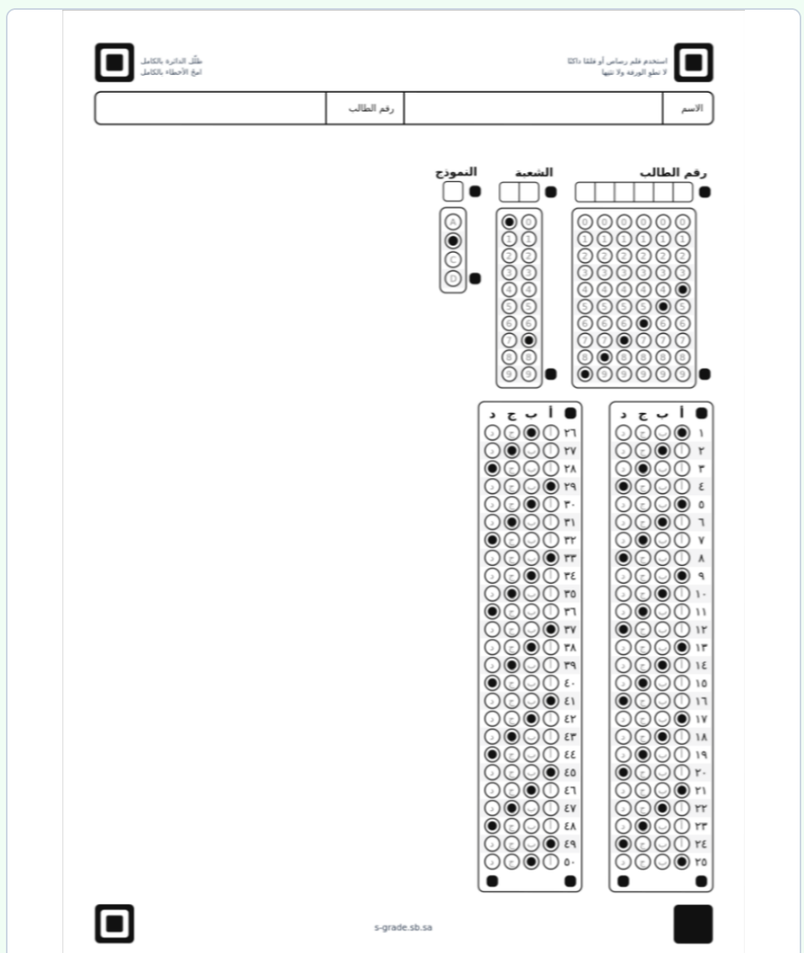
result.json

[AR] 50q · landscape sheet in portrait frame PASS

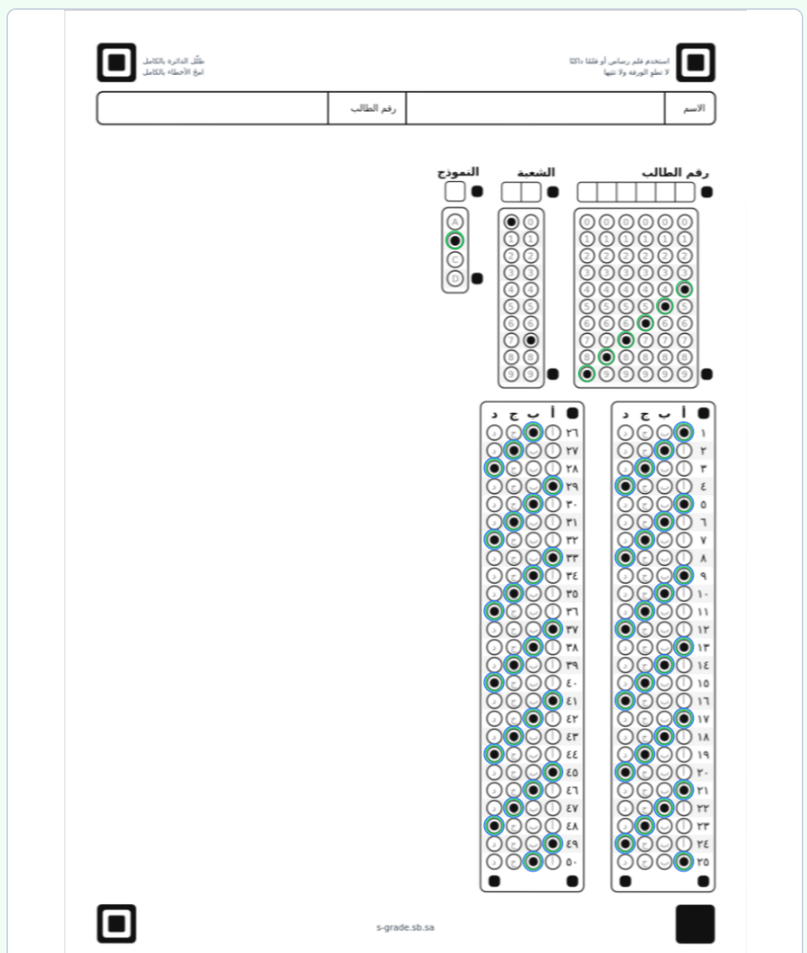
profile: `scene_landscape_in_portrait` · 574 passed · 0 failed



INPUT



WARPED



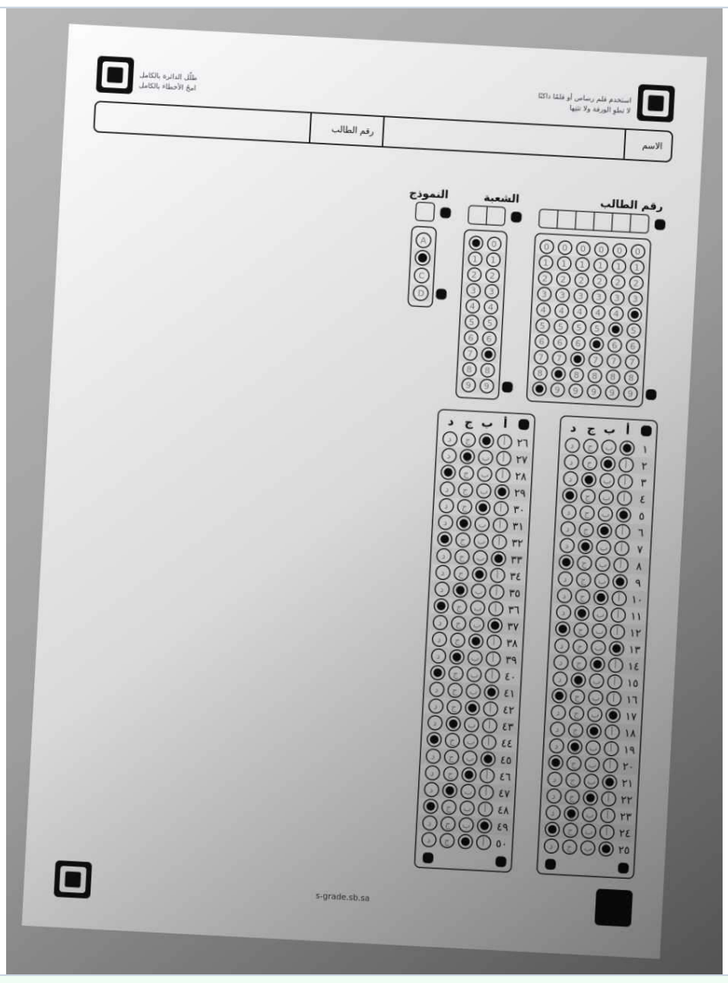
OVERLAY

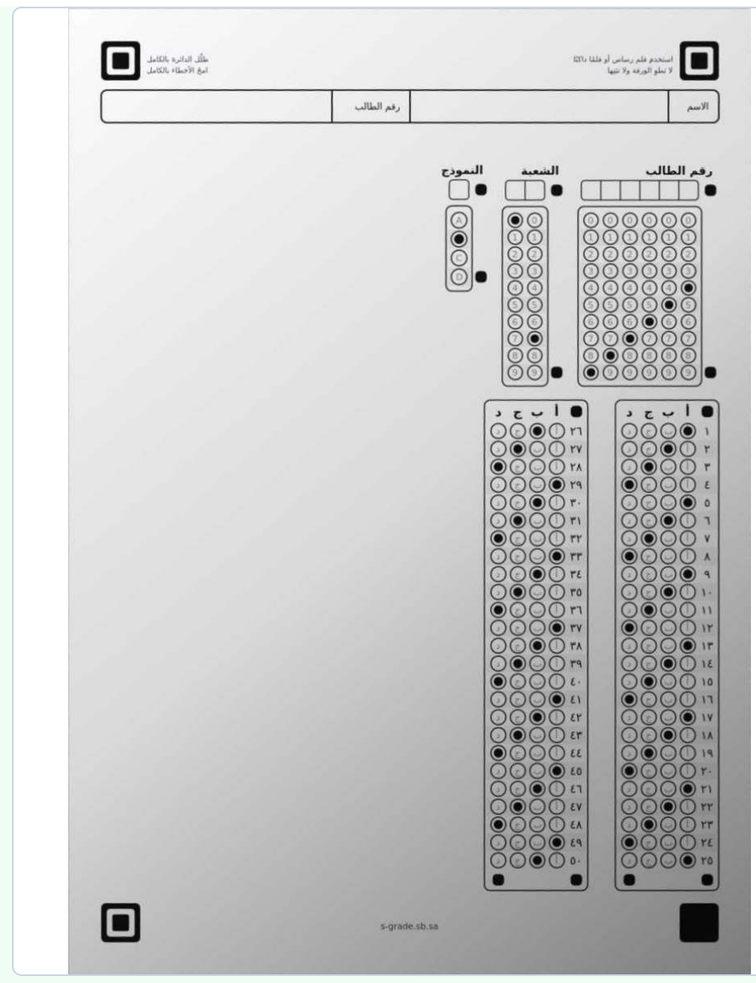
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

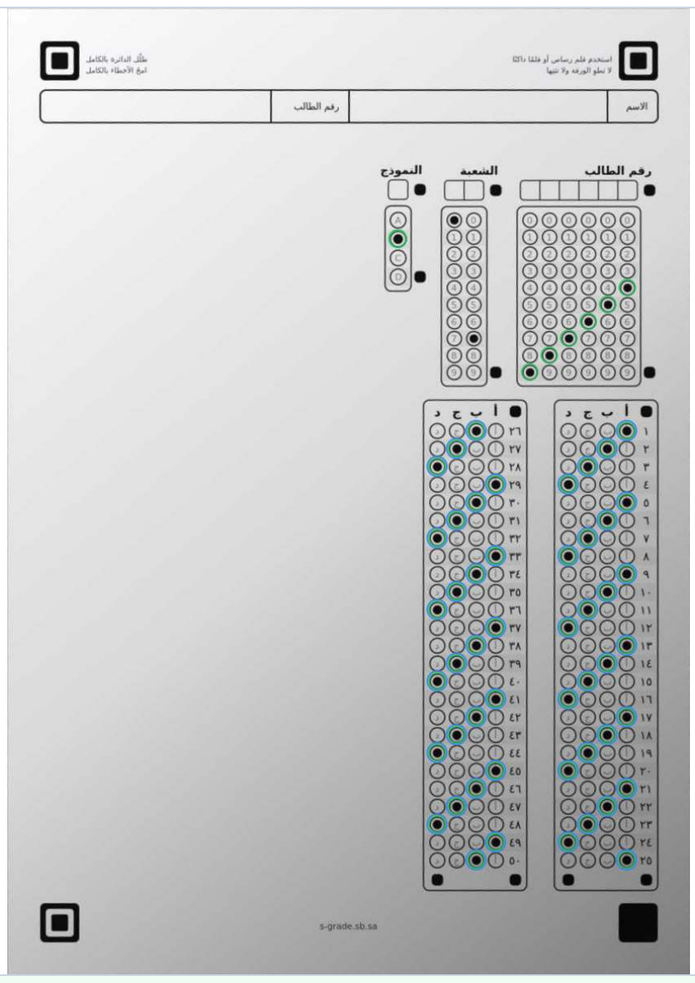
result.json

[AR] 50q · combo rotation + gradient + jpeg PASS

profile: `rotated_3deg → lighting_gradient → jpeg_q50` · 574 passed · 0 failed







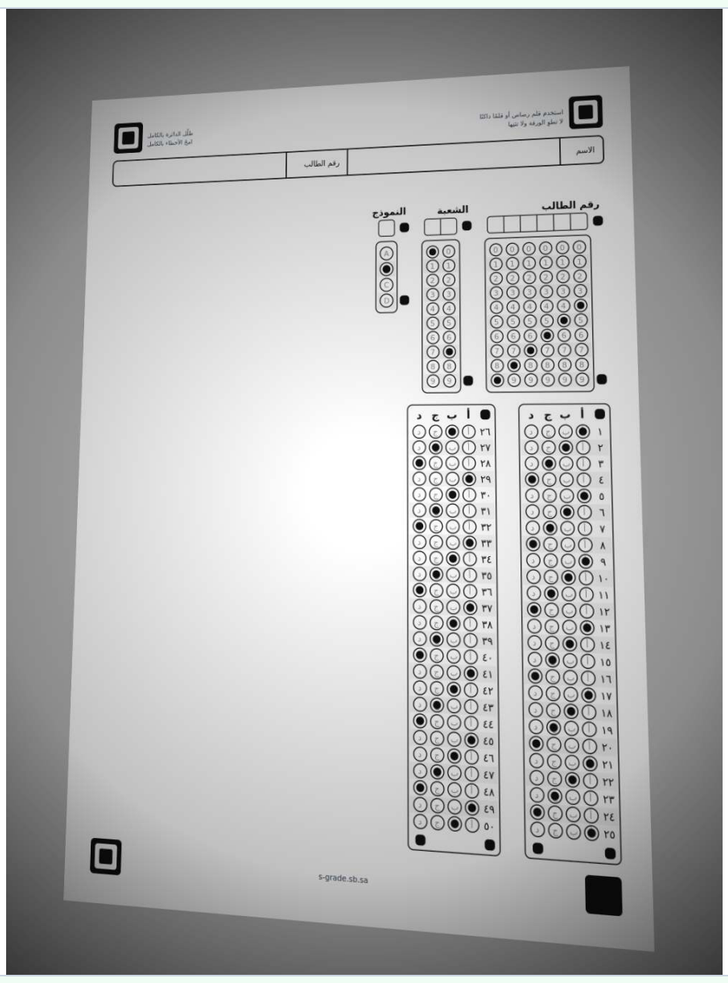
INPUT WARPED OVERLAY

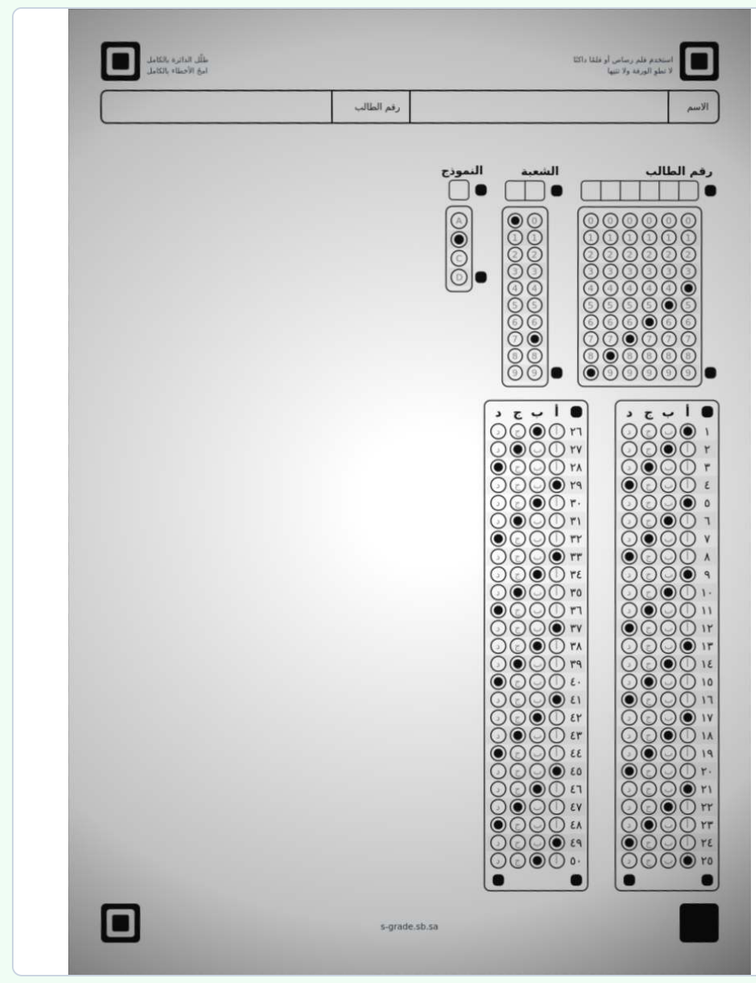
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

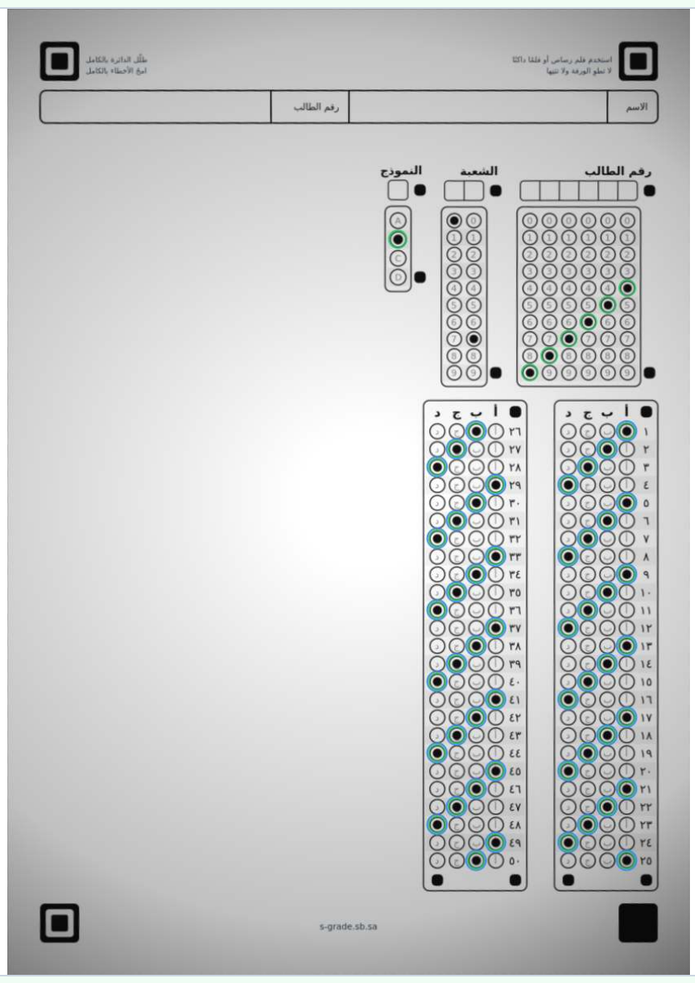
result.json

[AR] 50q · combo perspective + vignette PASS

profile: `perspective_mild → lighting_vignette` · 574 passed · 0 failed







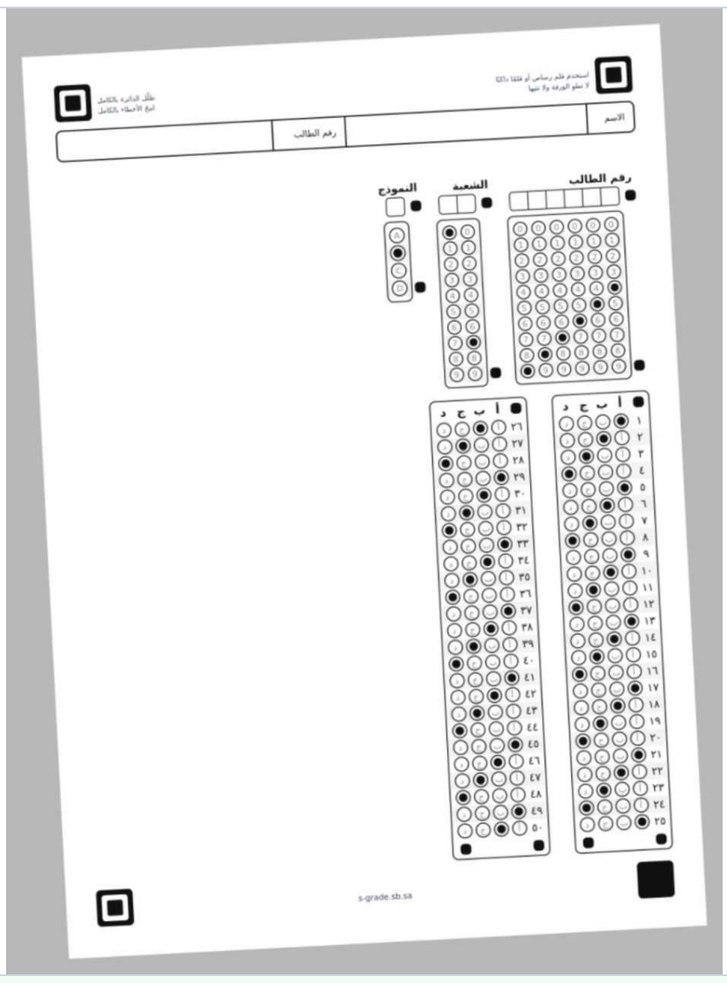
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

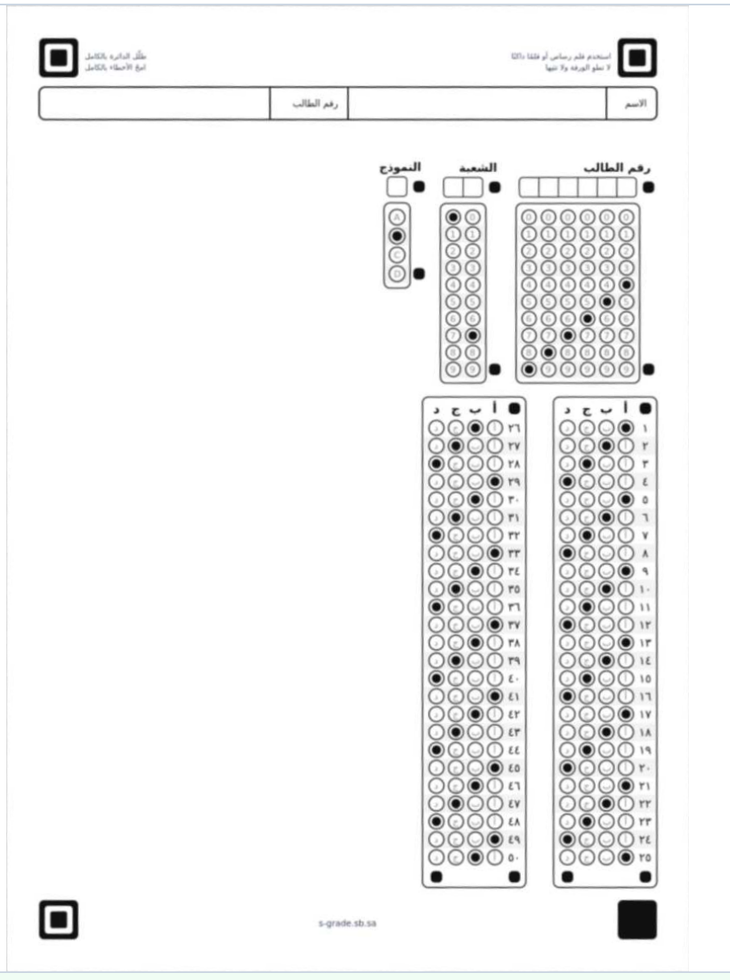
result.json

[AR] 50q · combo -rotation + low res + jpeg PASS

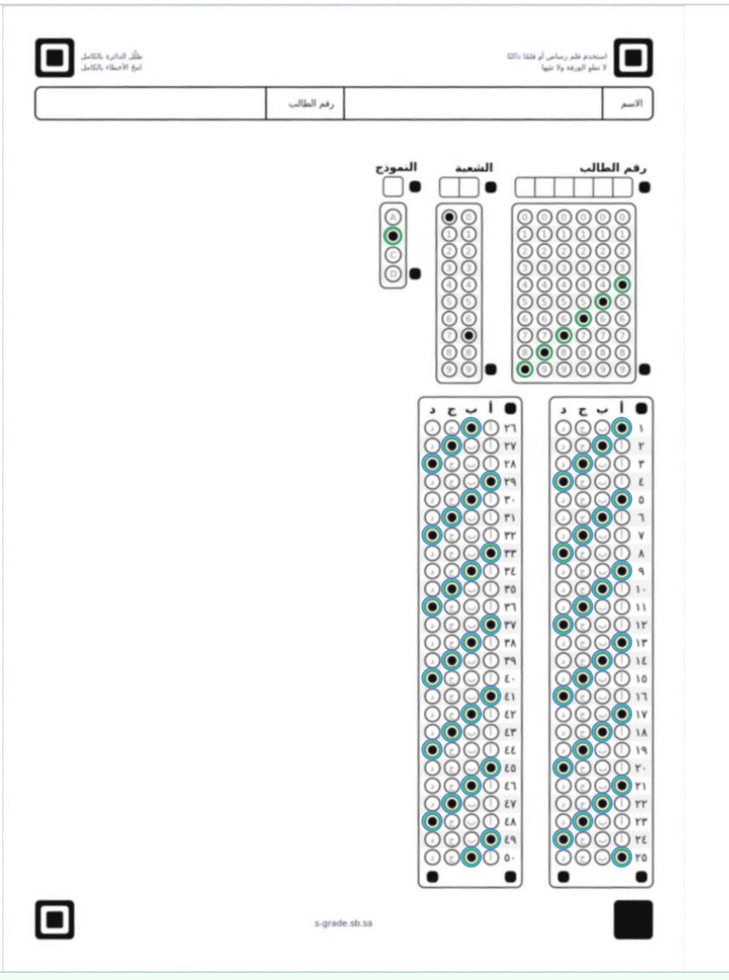
profile: `rotated_neg3deg → low_res → jpeg_q50` · 574 passed · 0 failed



INPUT



WARPED



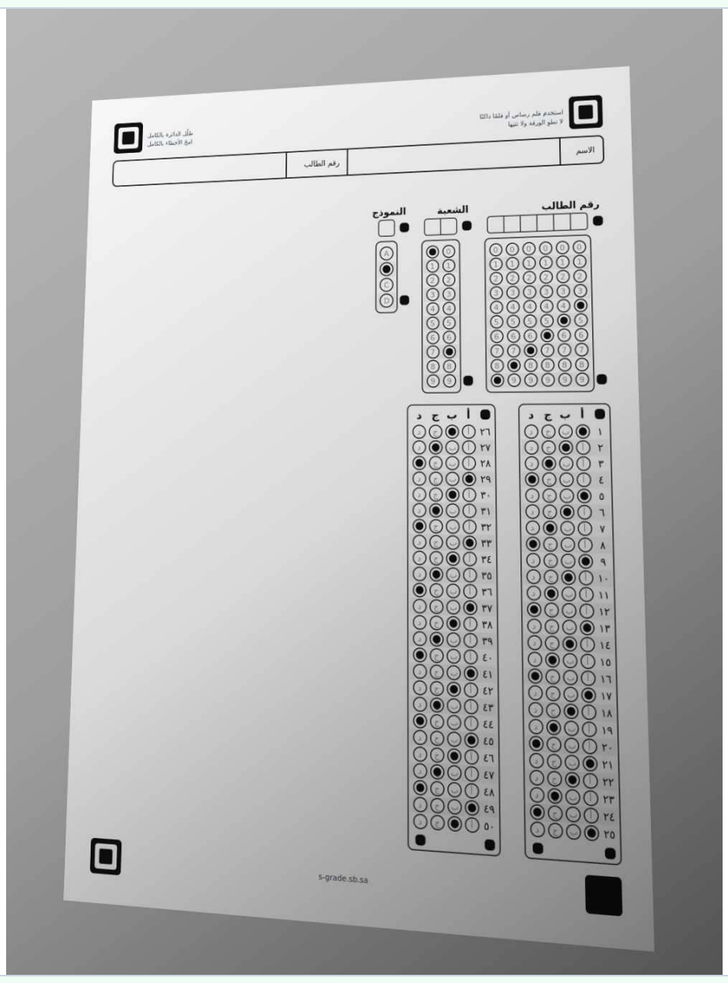
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

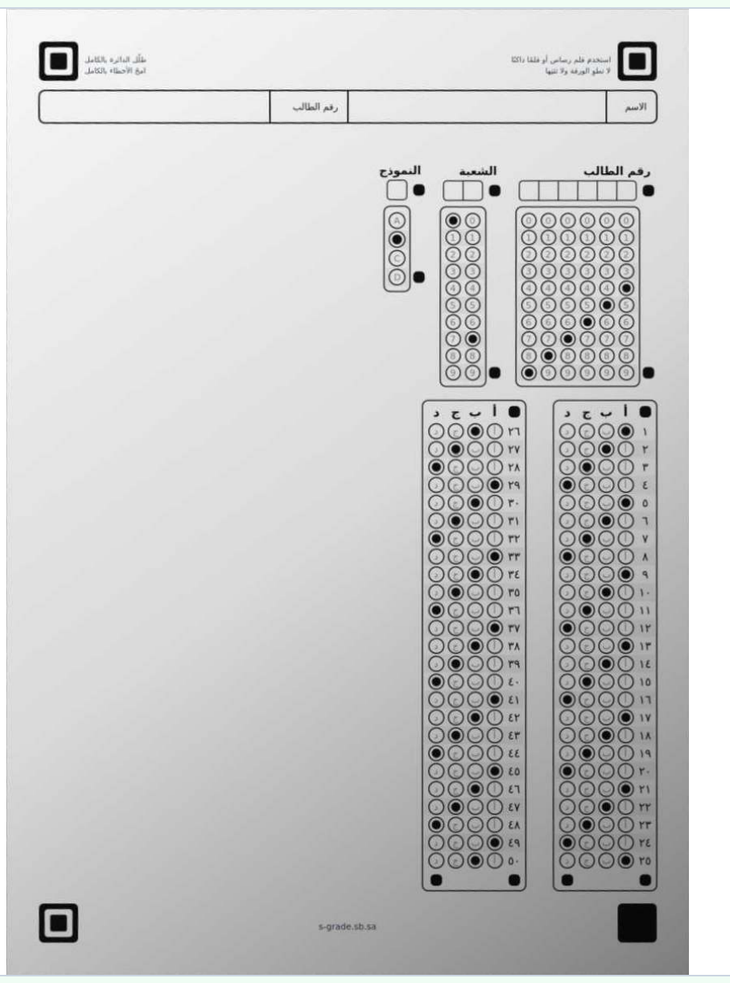
result.json

[AR] 50q · combo perspective + gradient + jpeg PASS

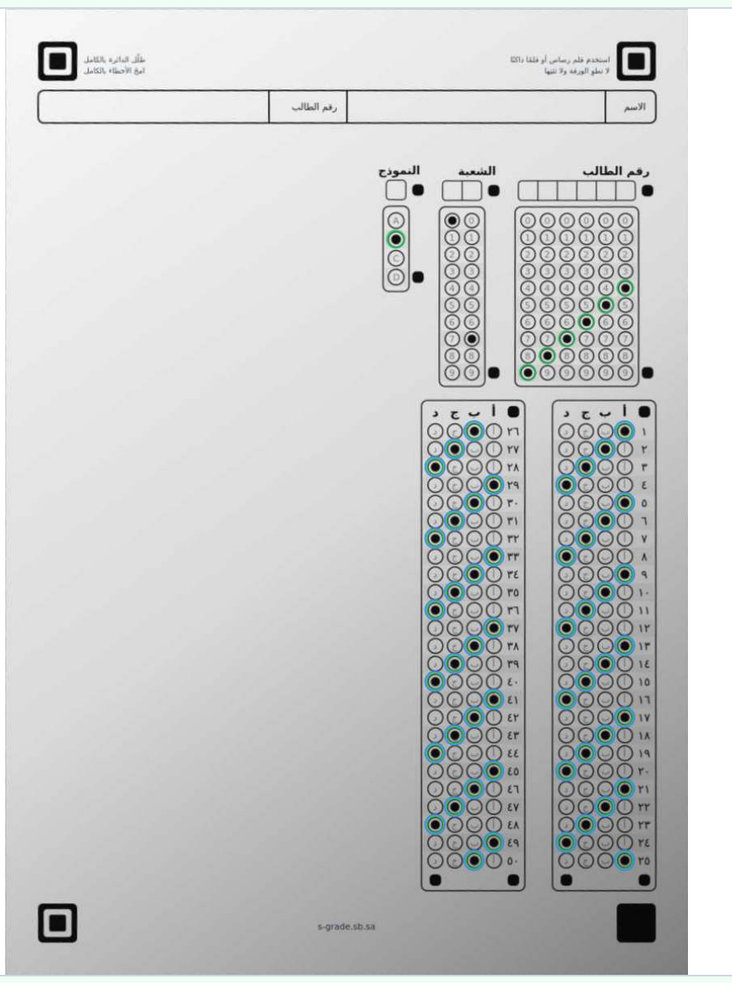
profile: `perspective_mild → lighting_gradient → jpeg_q50` · 574 passed · 0 failed



INPUT



WARPED



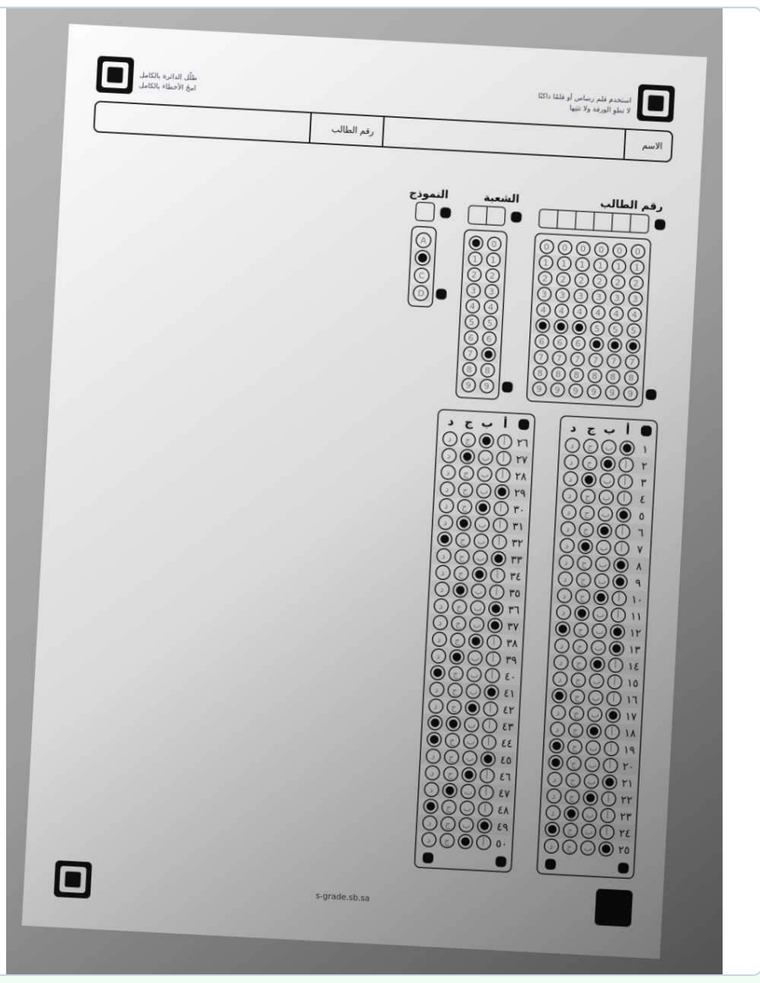
OVERLAY

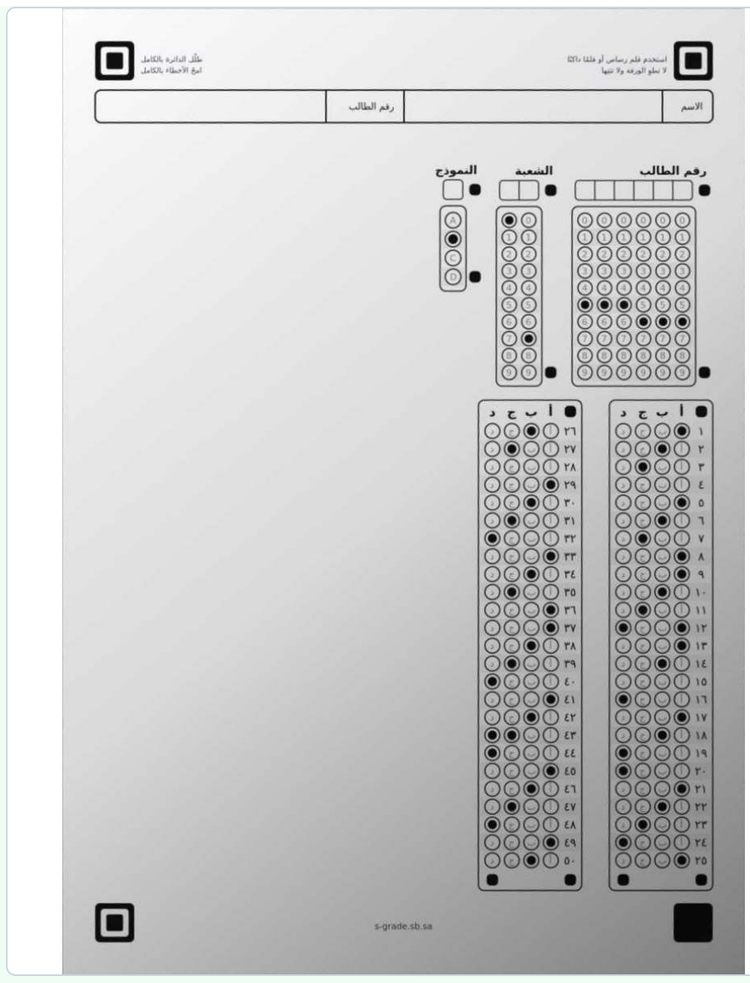
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

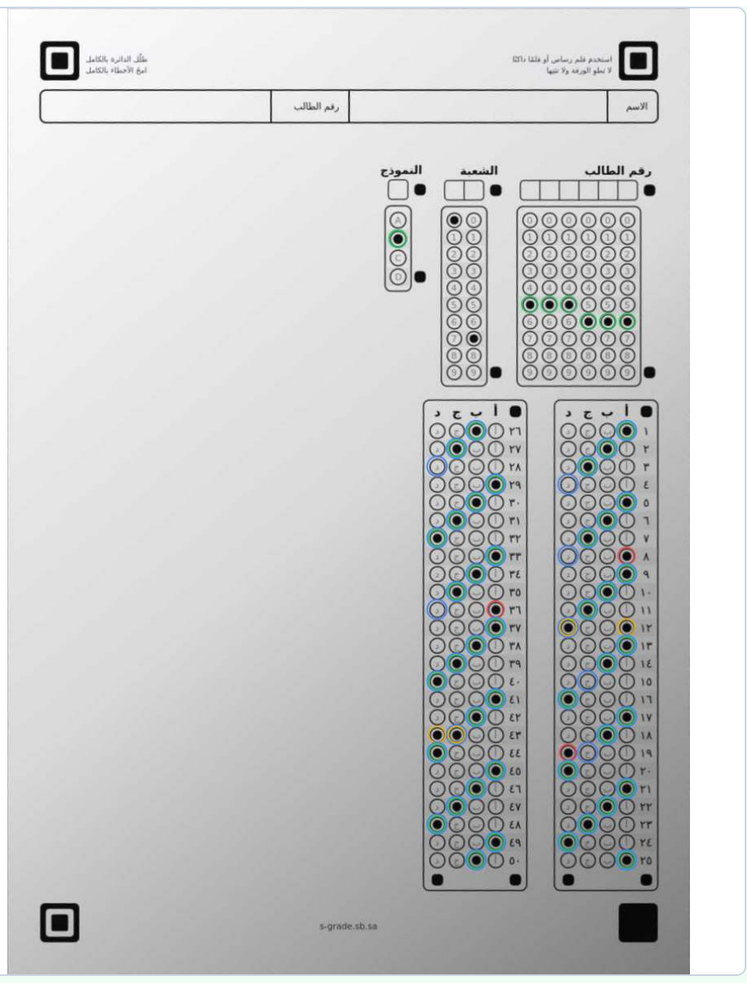
result.json

[AR] 50q · mixed + rotation + gradient + jpeg PASS

profile: `rotated_3deg → lighting_gradient → jpeg_q50` · 574 passed · 0 failed







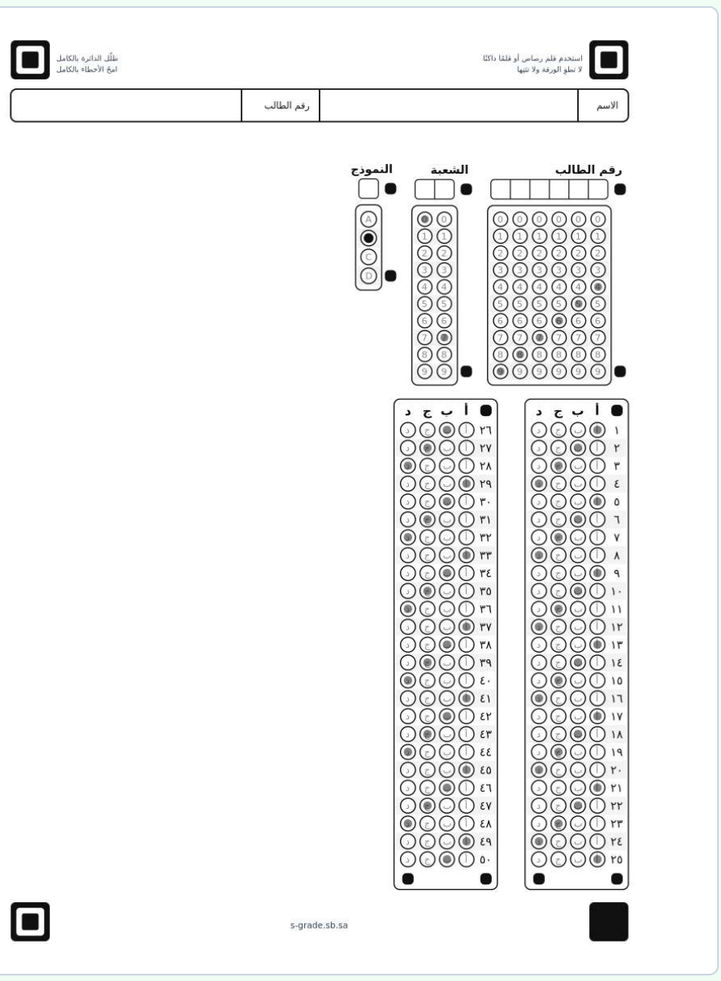
INPUT WARPED OVERLAY

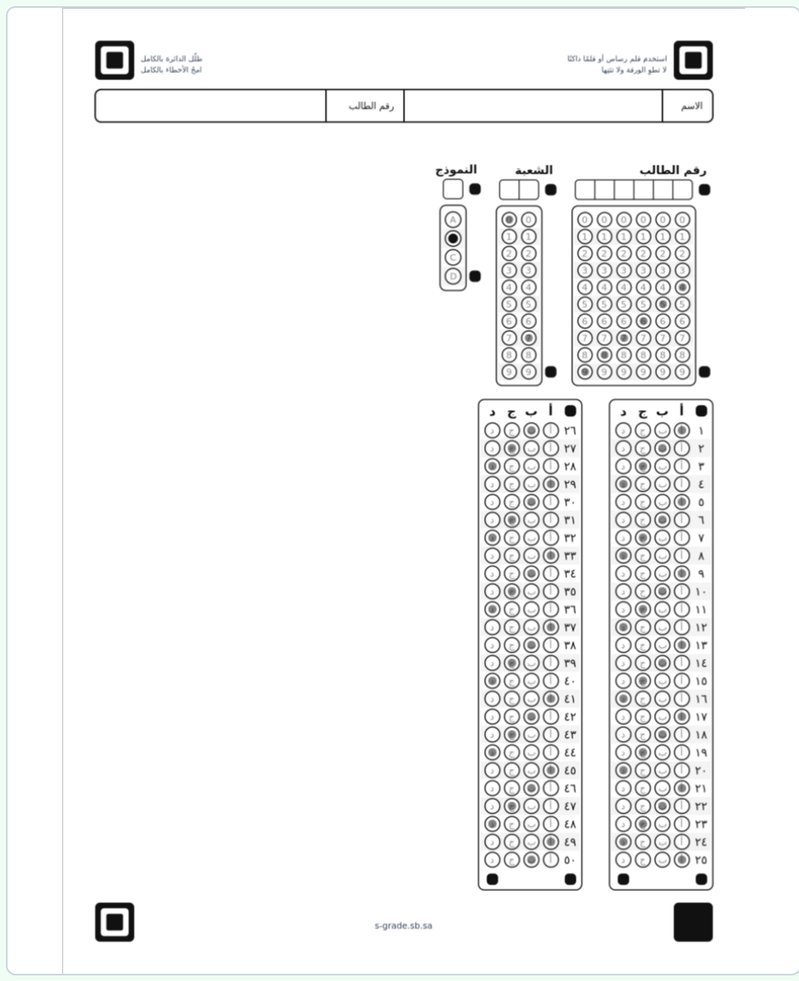
field	expected	actual	
studentId	`555666`	`555666`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`42`	`42`	✓

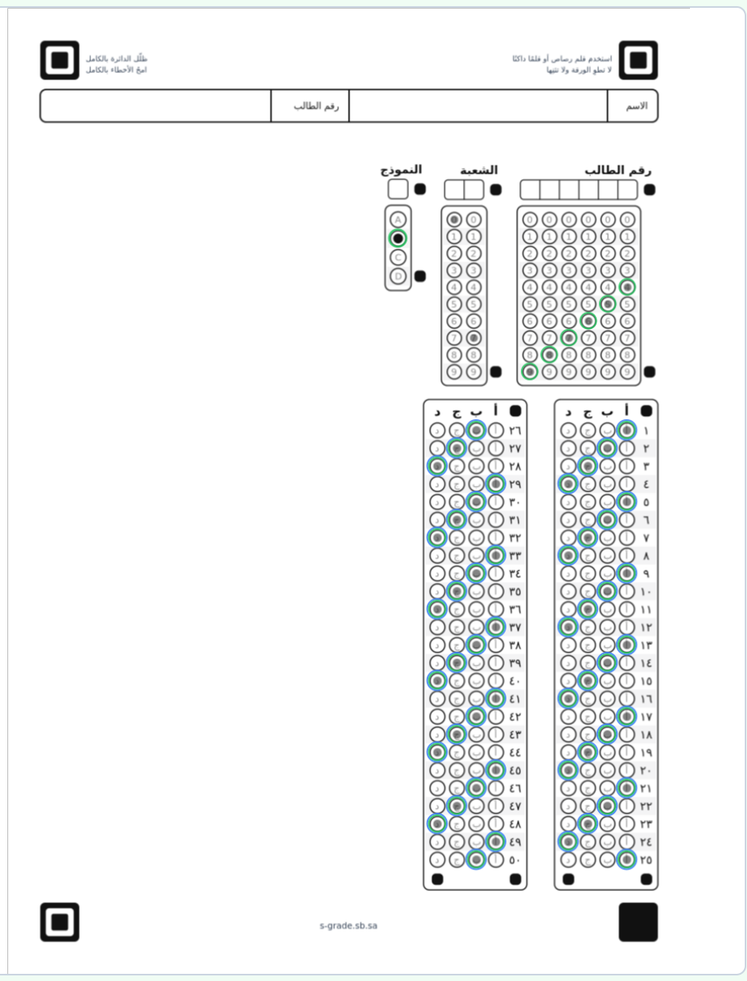
result.json

[AR] 50q · light pencil fills PASS

profile: `pristine` · 574 passed · 0 failed







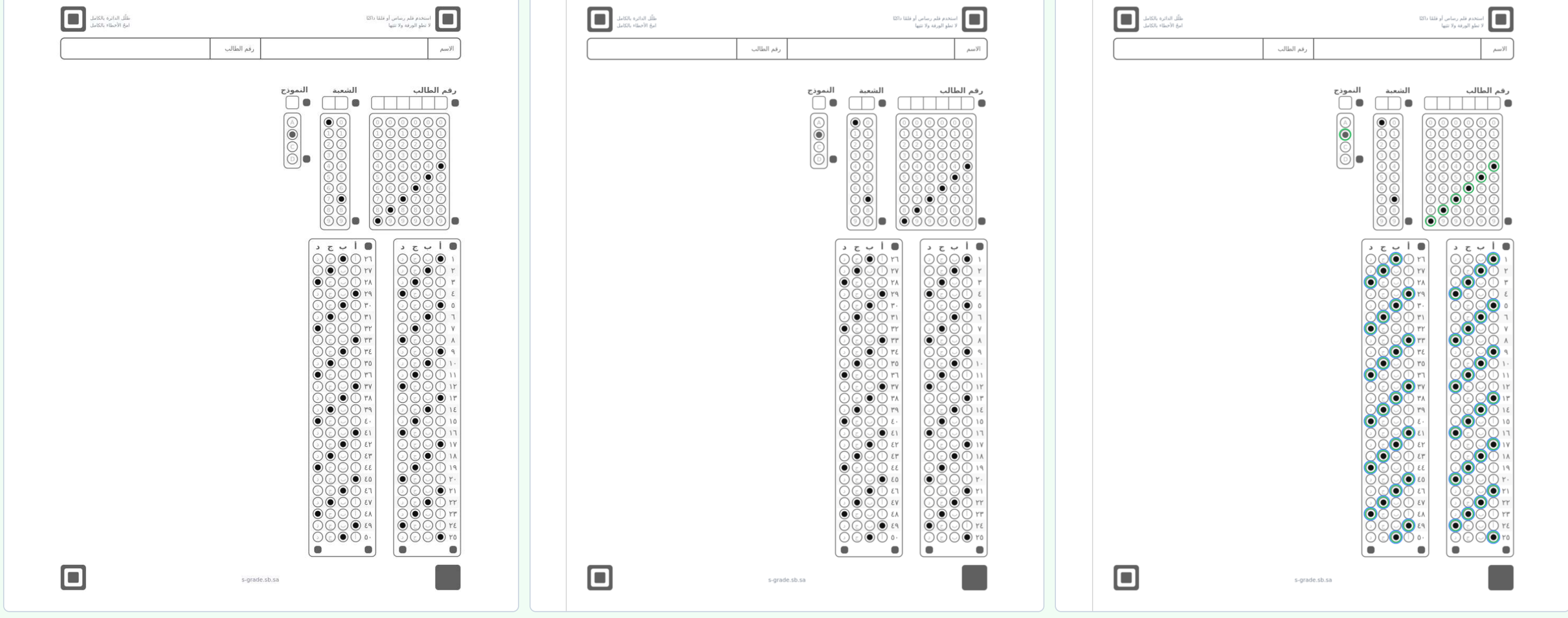
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · low toner print PASS

profile: `pristine` · 574 passed · 0 failed



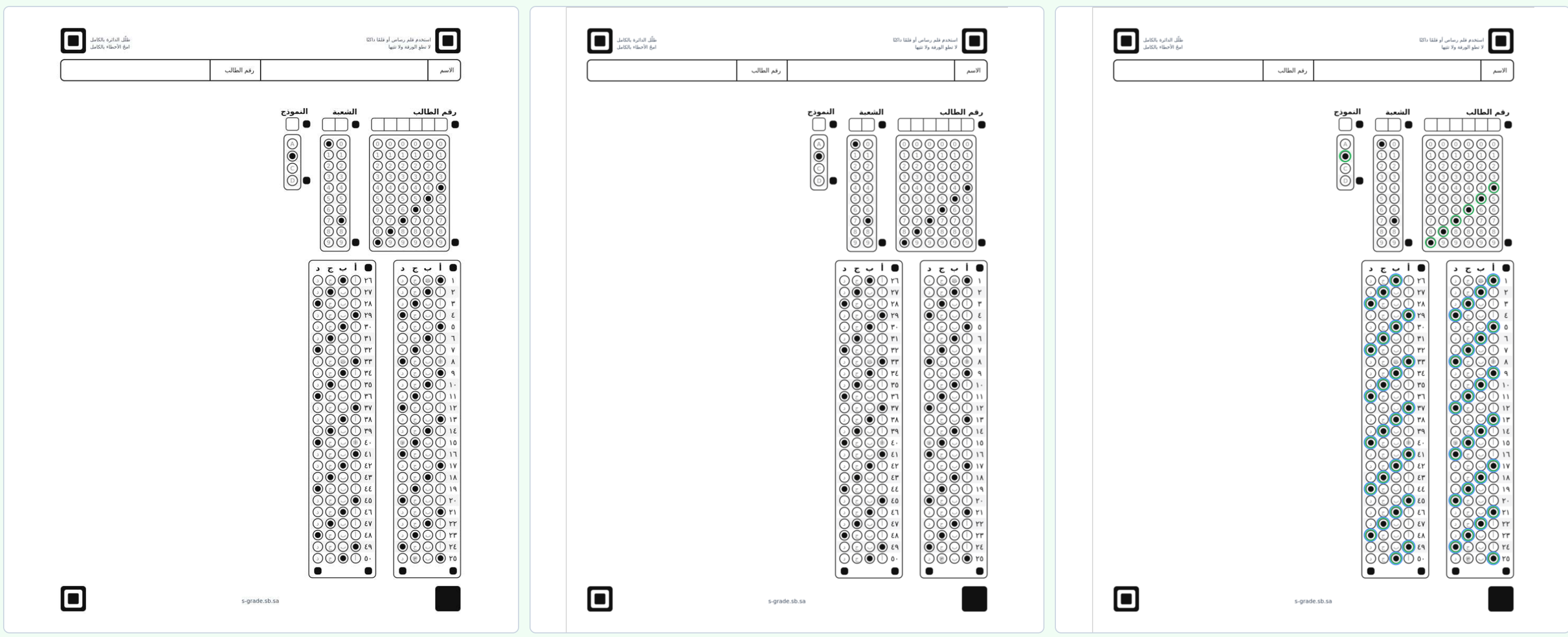
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · eraser smudges PASS

profile: `pristine` · 574 passed · 0 failed



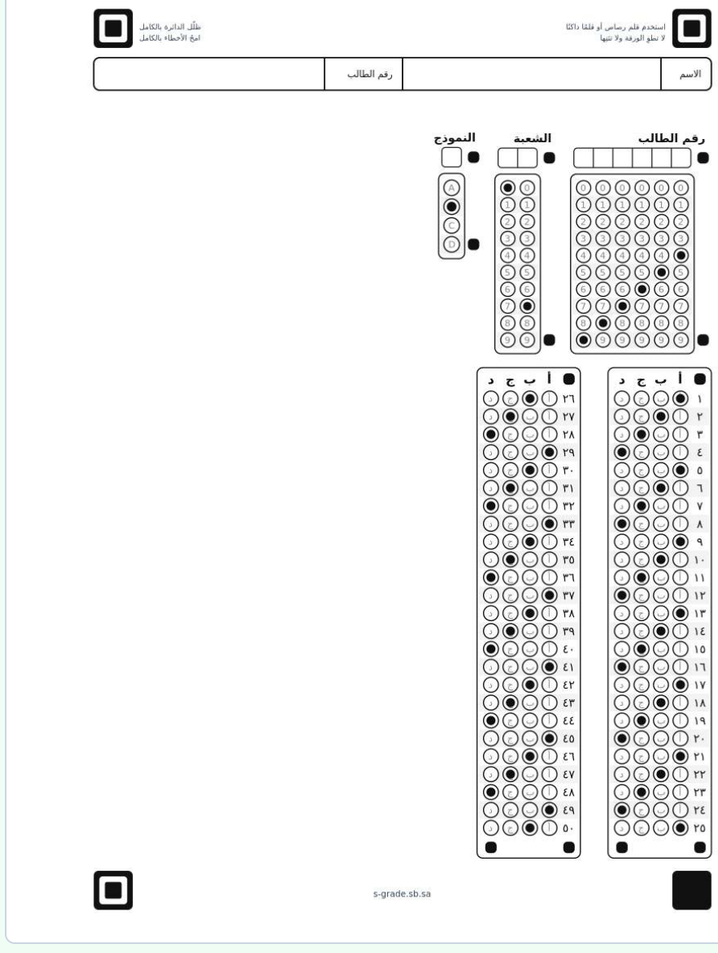
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

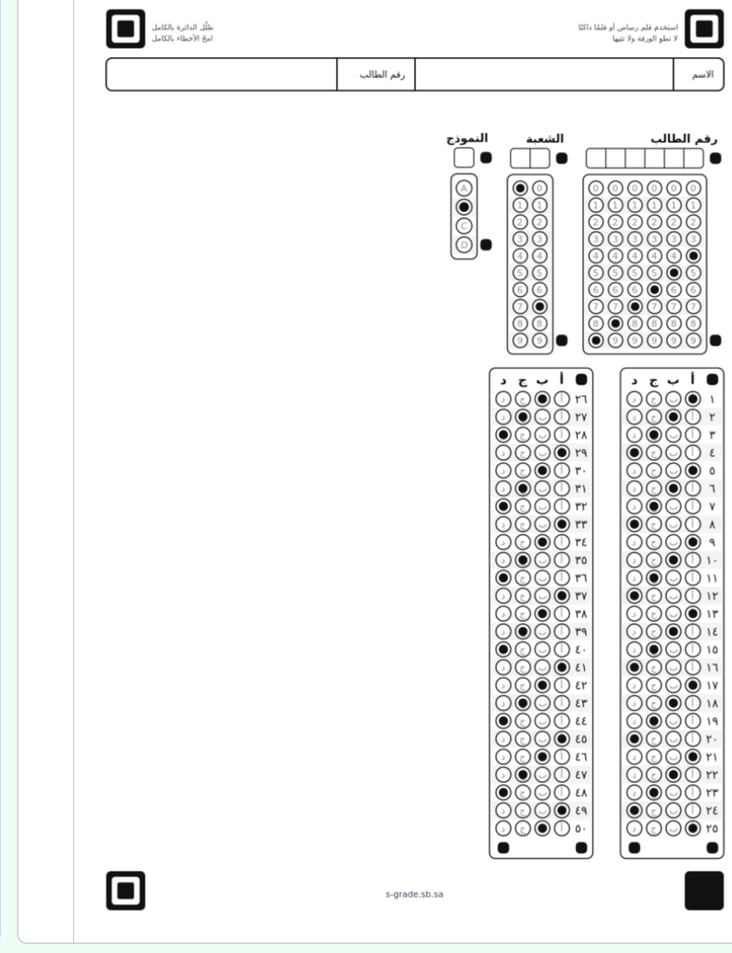
result.json

[AR] 50q · glare hotspot PASS

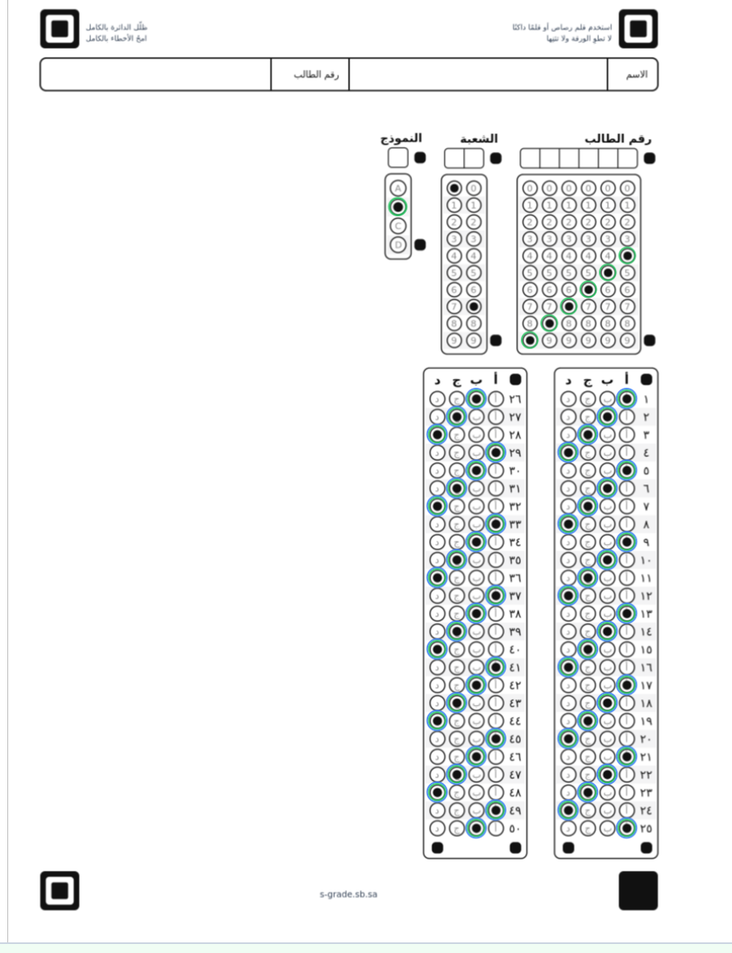
profile: `glare_hotspot` · 574 passed · 0 failed



INPUT



WARPED



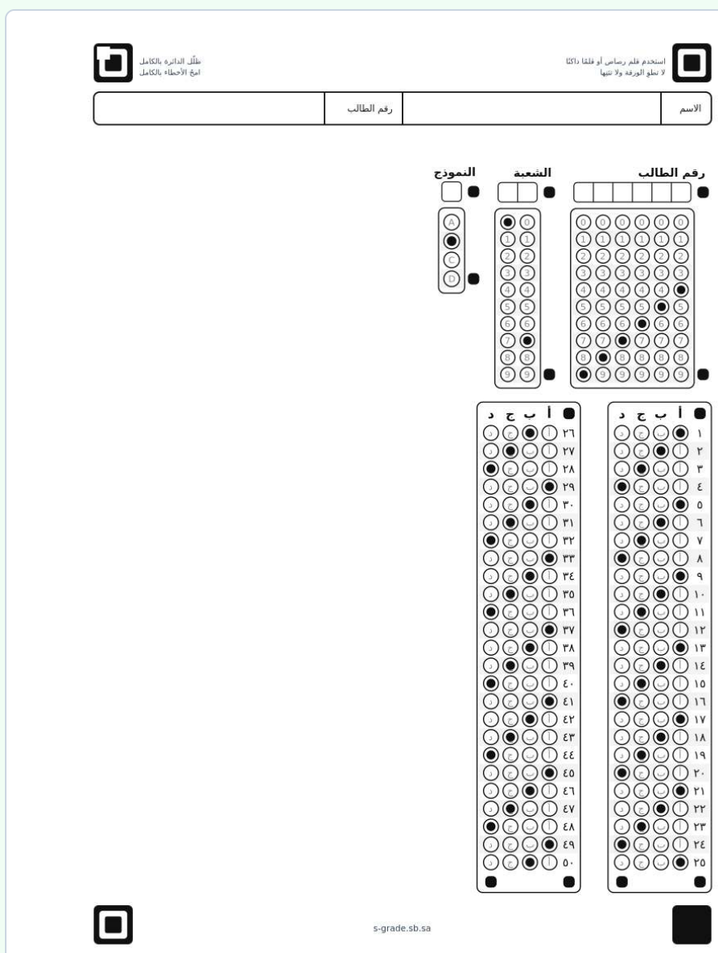
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

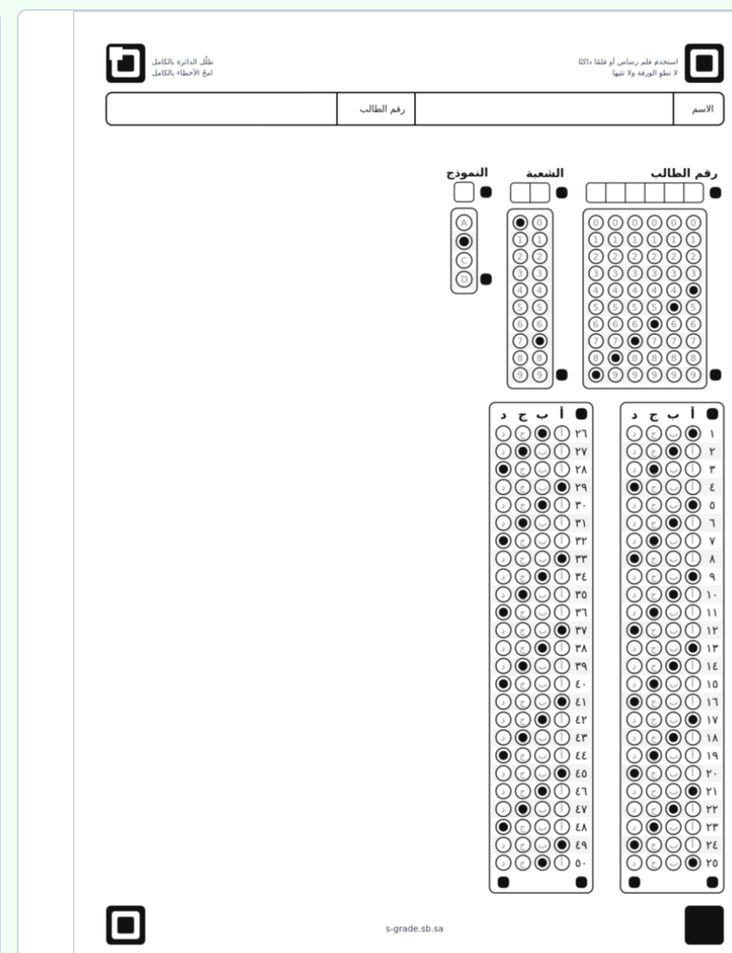
result.json

[AR] 50q · damaged fiducial (TL) PASS

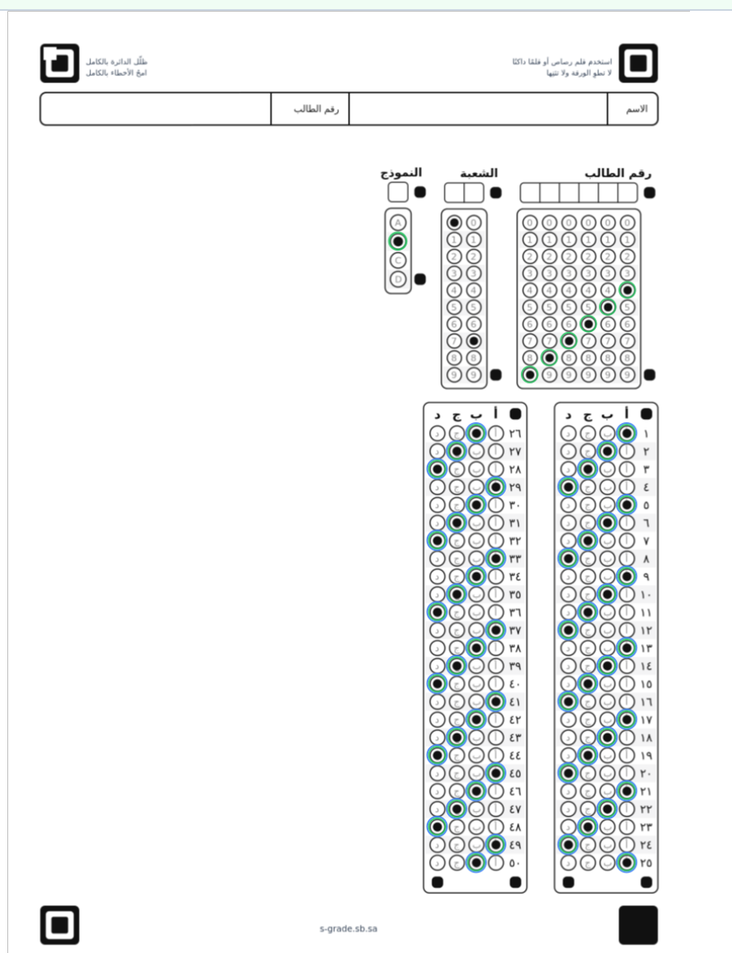
profile: `damaged_fiducial_tl` · 574 passed · 0 failed



INPUT



WARPED



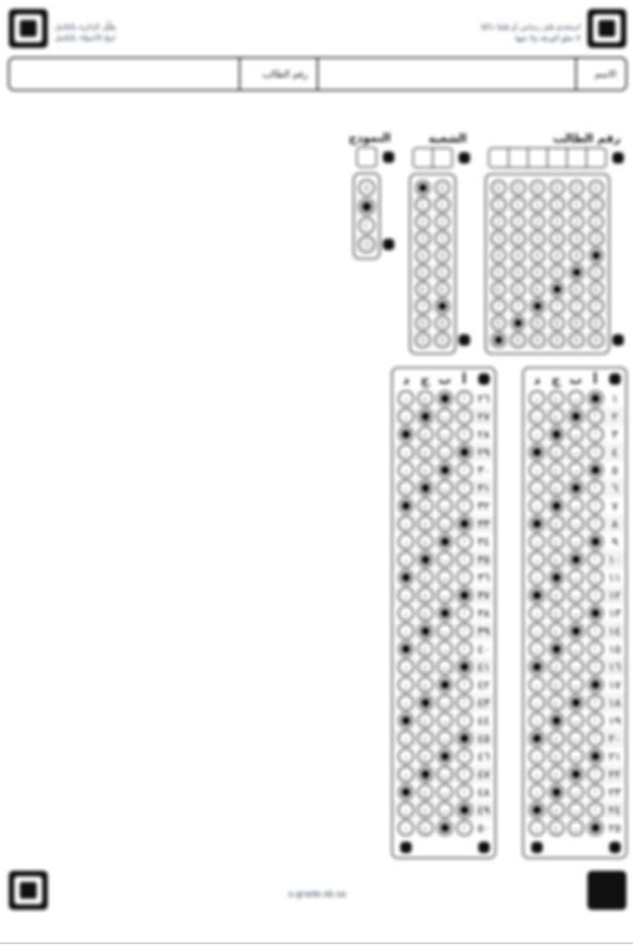
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

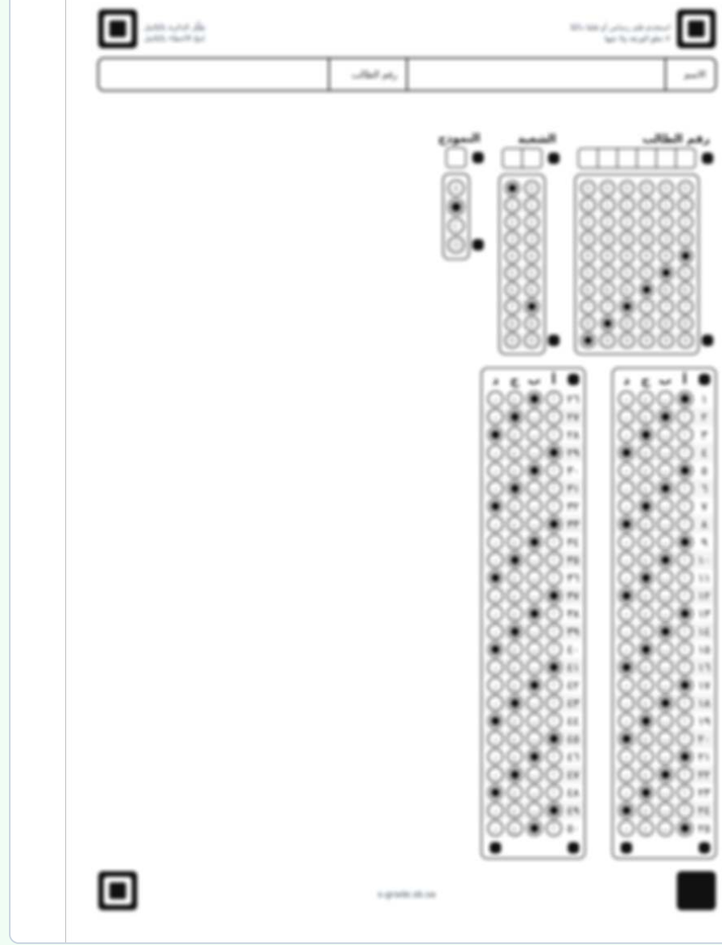
result.json

[AR] 50q · out of focus (gaussian) PASS

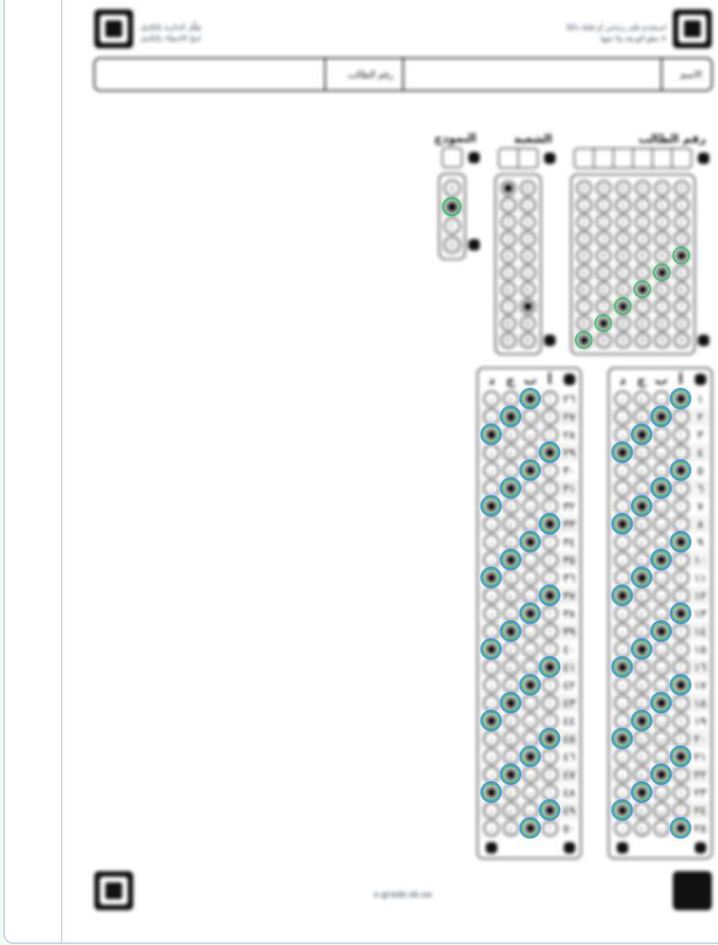
profile: `out_of_focus` · 574 passed · 0 failed



INPUT



WARPED



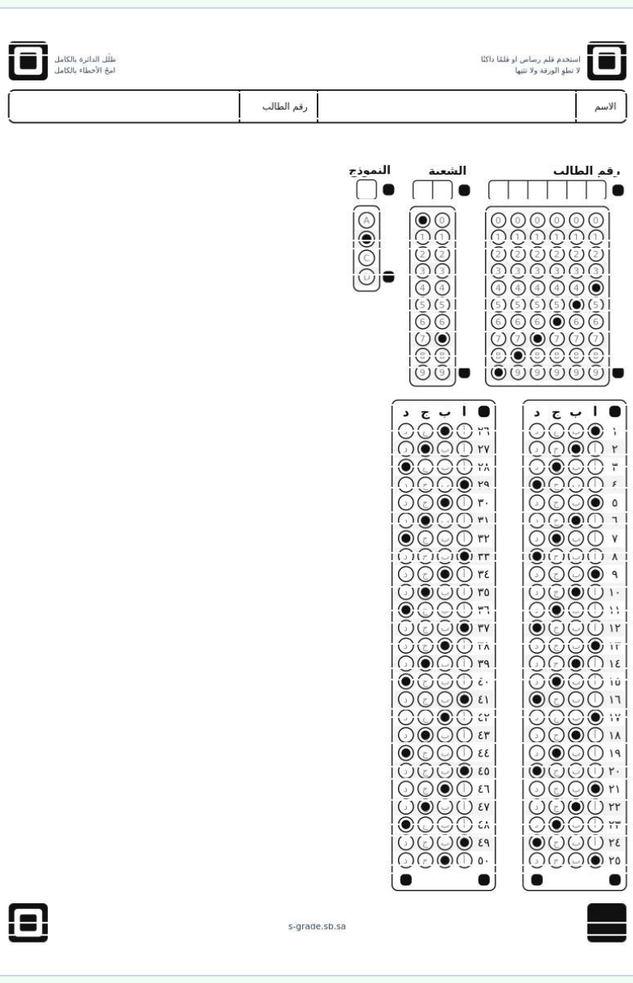
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

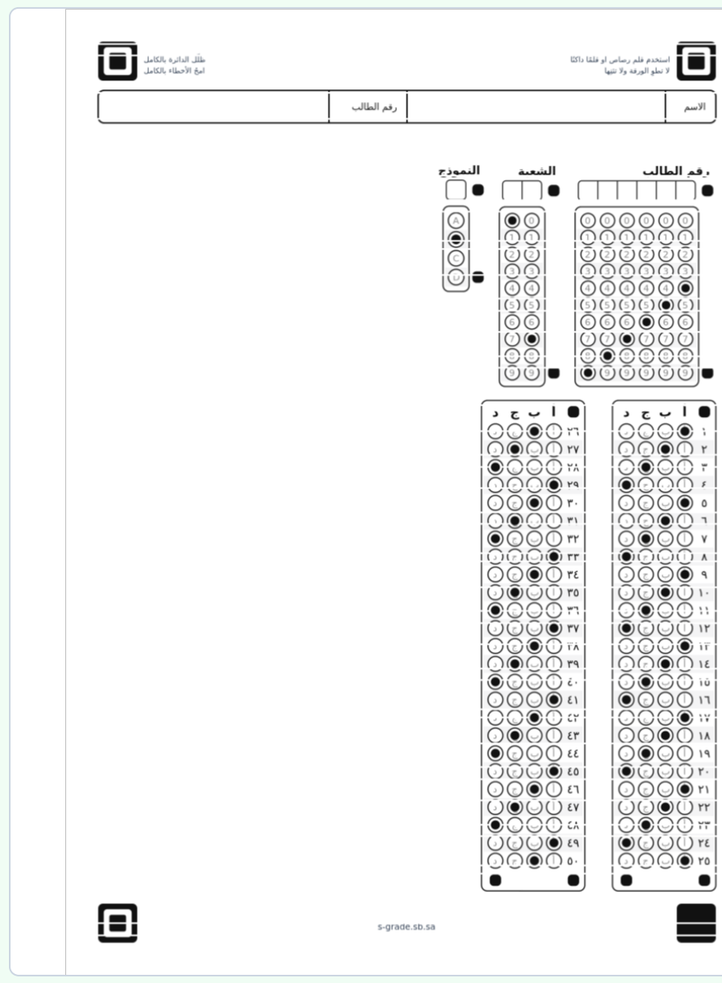
result.json

[AR] 50q · streaky printer bands PASS

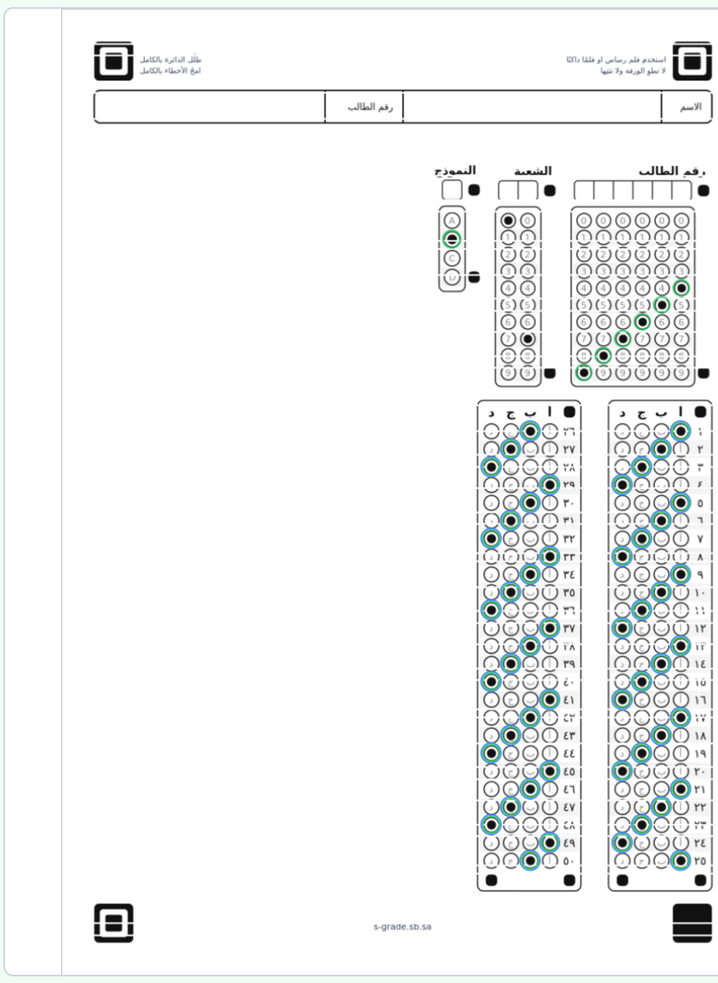
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



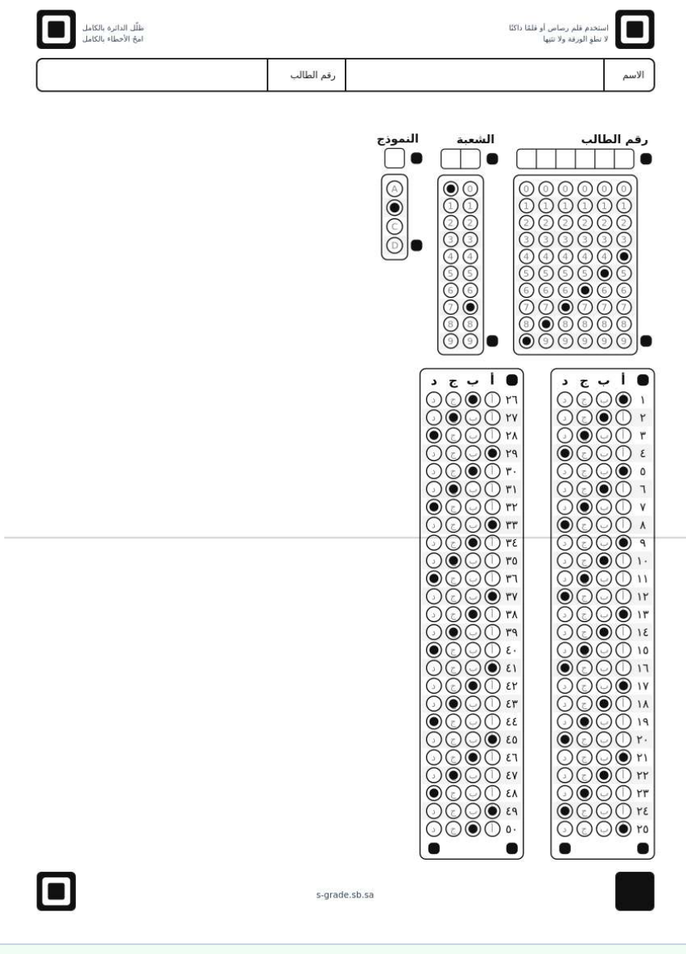
OVERLAY

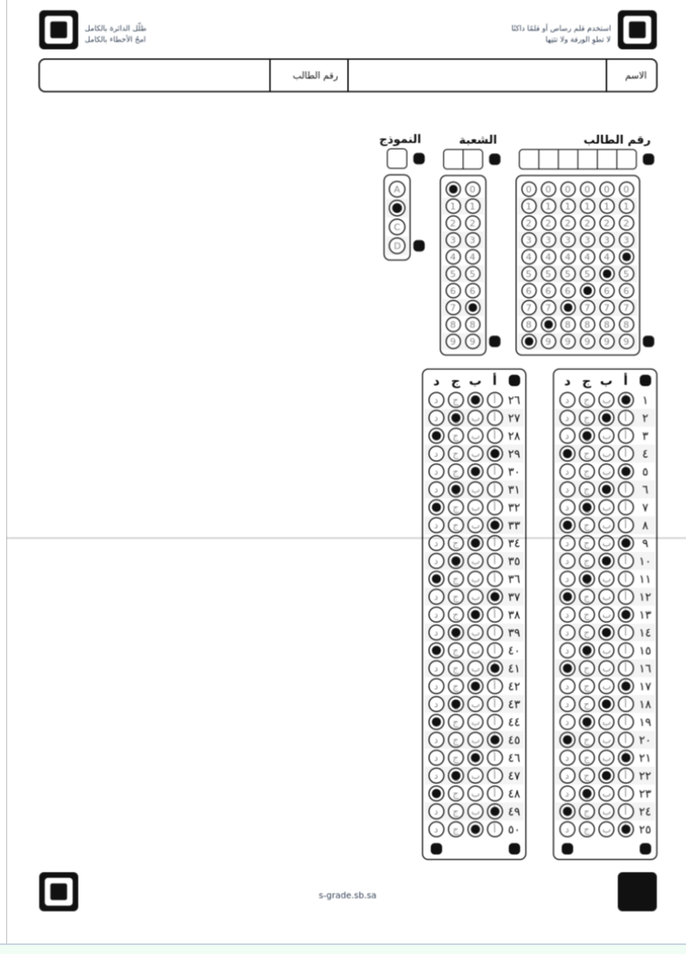
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

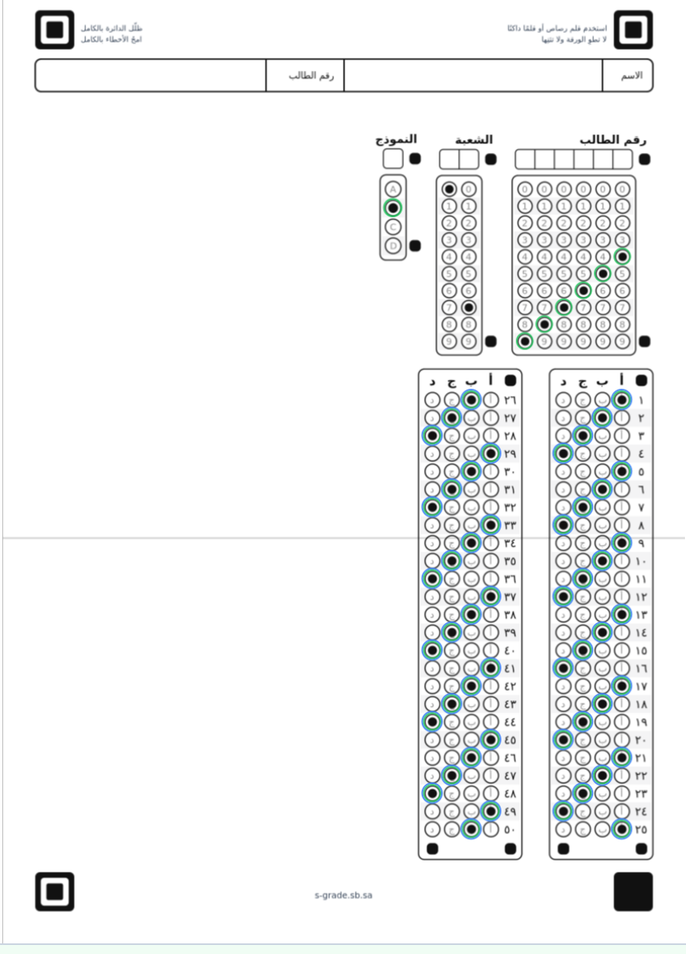
result.json

[AR] 50q · fold crease line PASS

profile: `fold_crease` · 574 passed · 0 failed







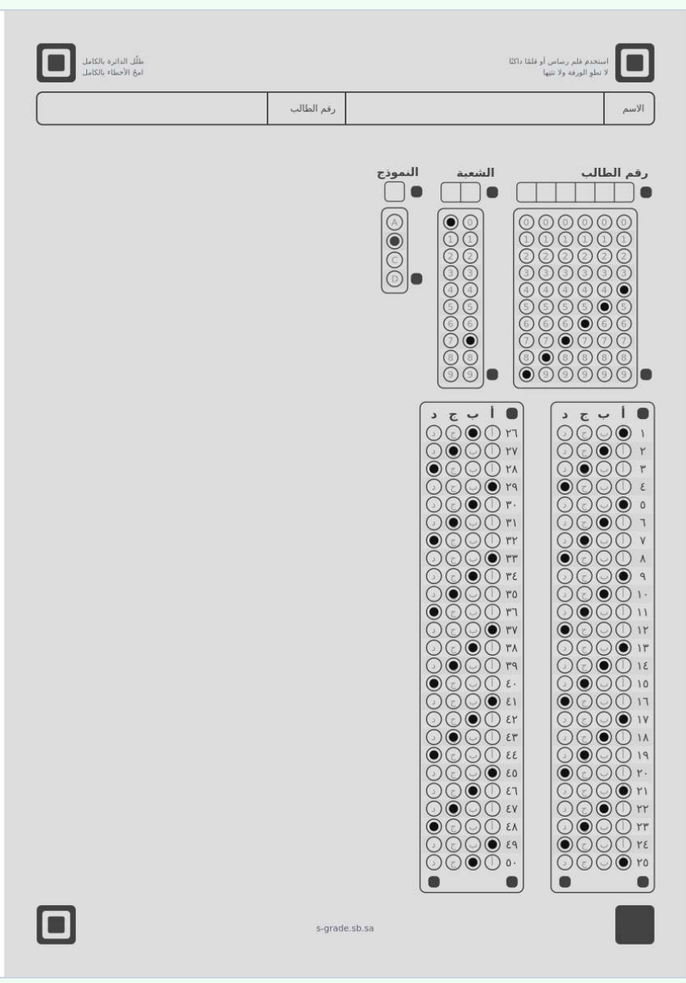
INPUT WARPED OVERLAY

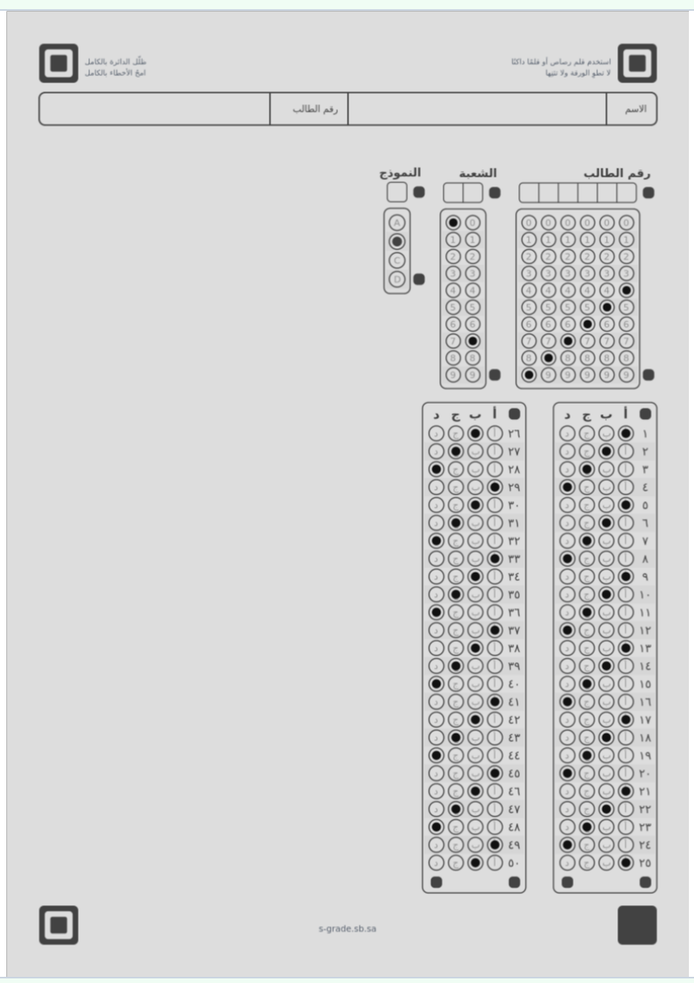
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

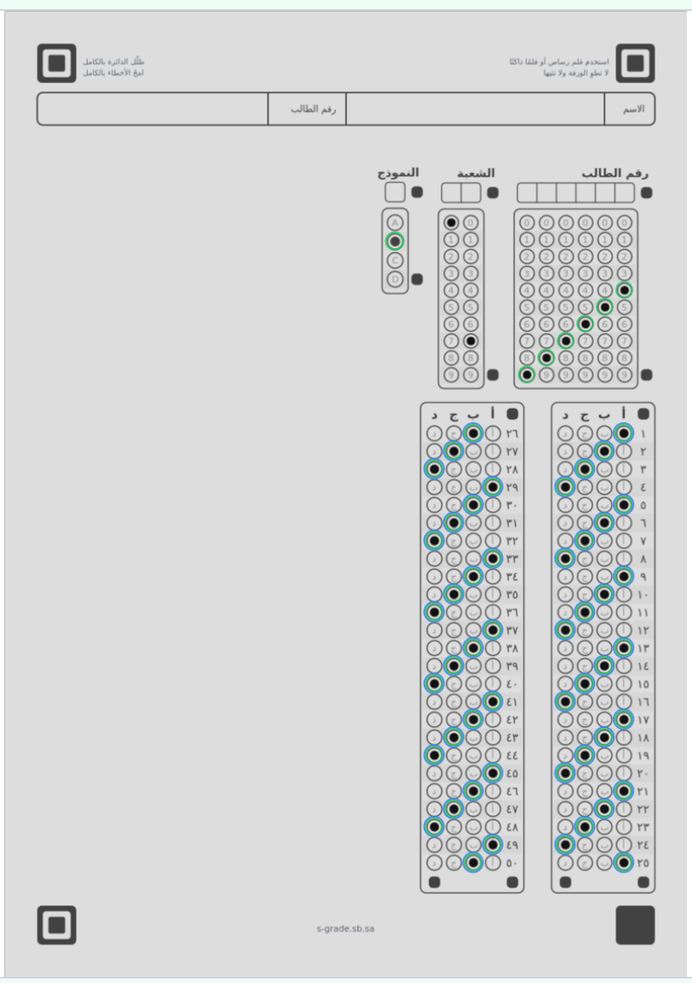
result.json

[AR] 50q · photocopy-of-a-photocopy PASS

profile: `pristine` · 574 passed · 0 failed







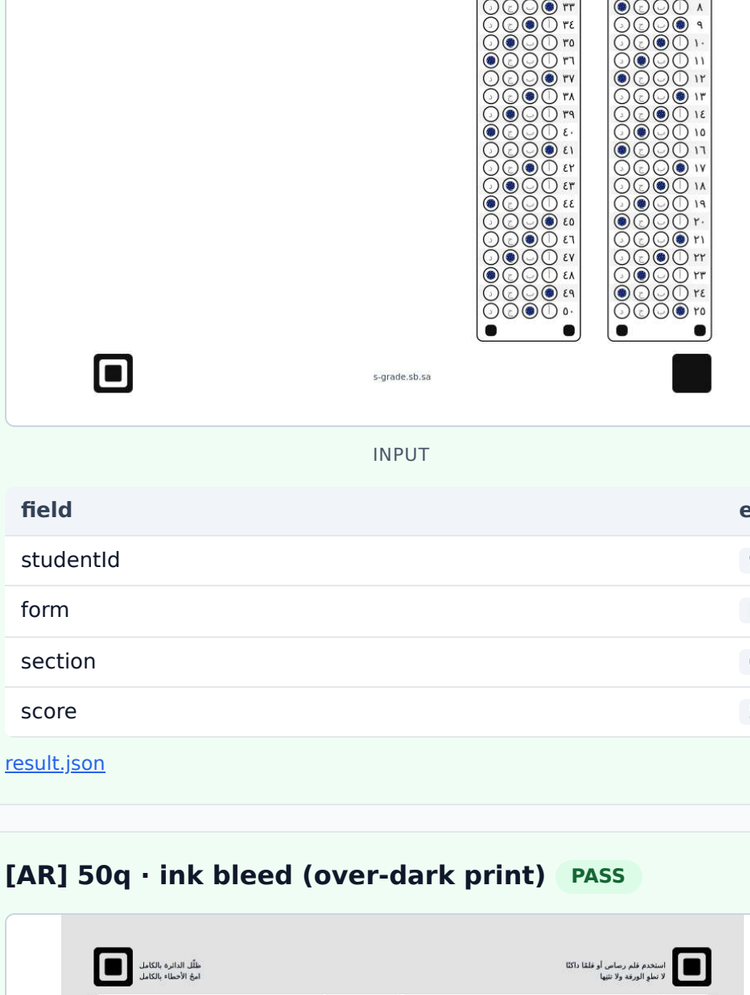
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

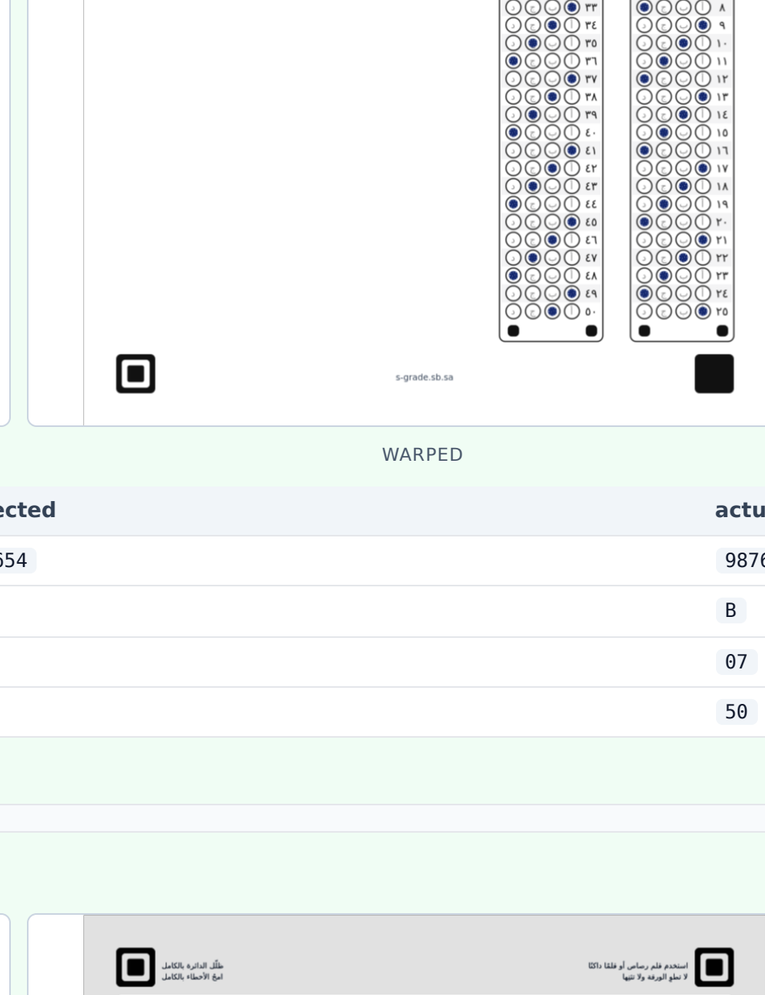
result.json

[AR] 50q · ballpoint pen fill PASS

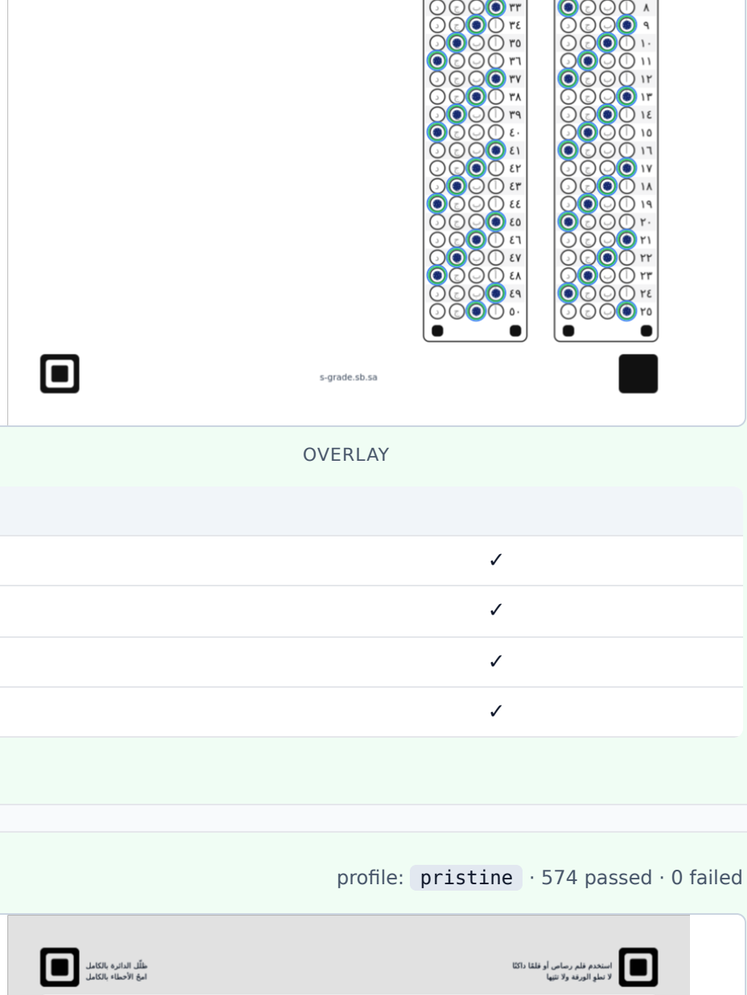
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



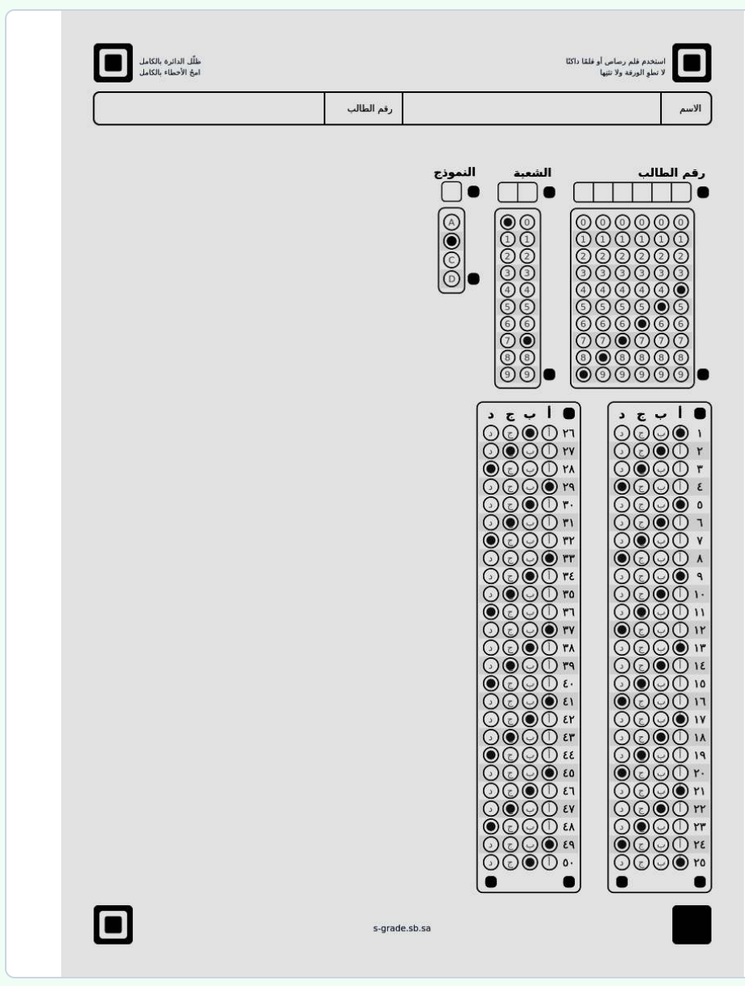
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

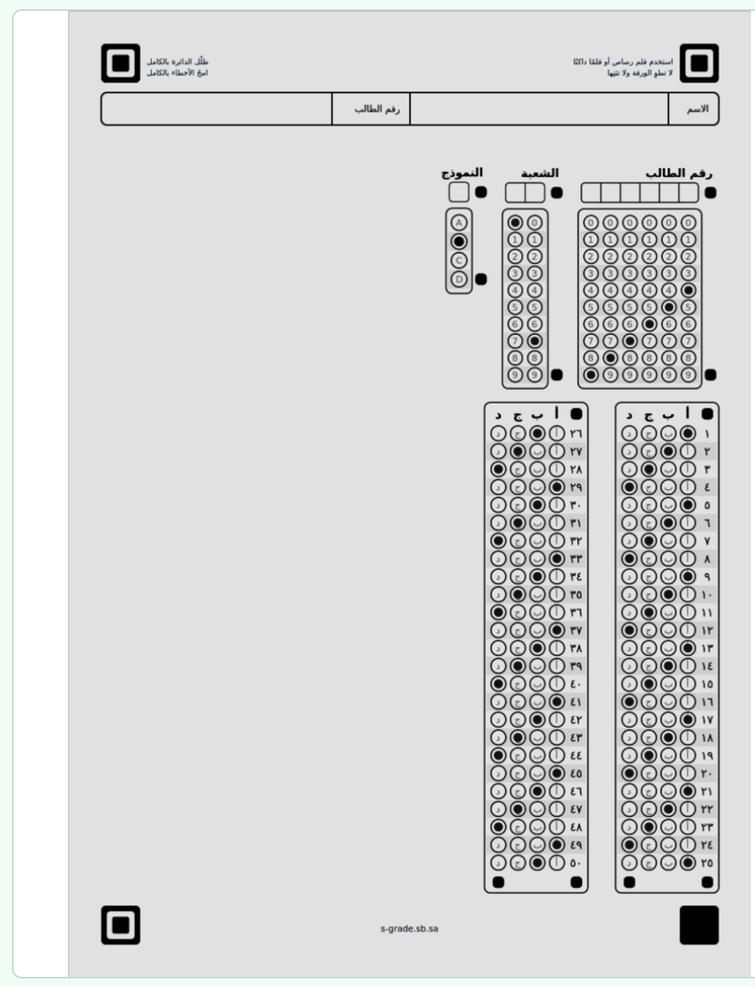
result.json

[AR] 50q · ink bleed (over-dark print) PASS

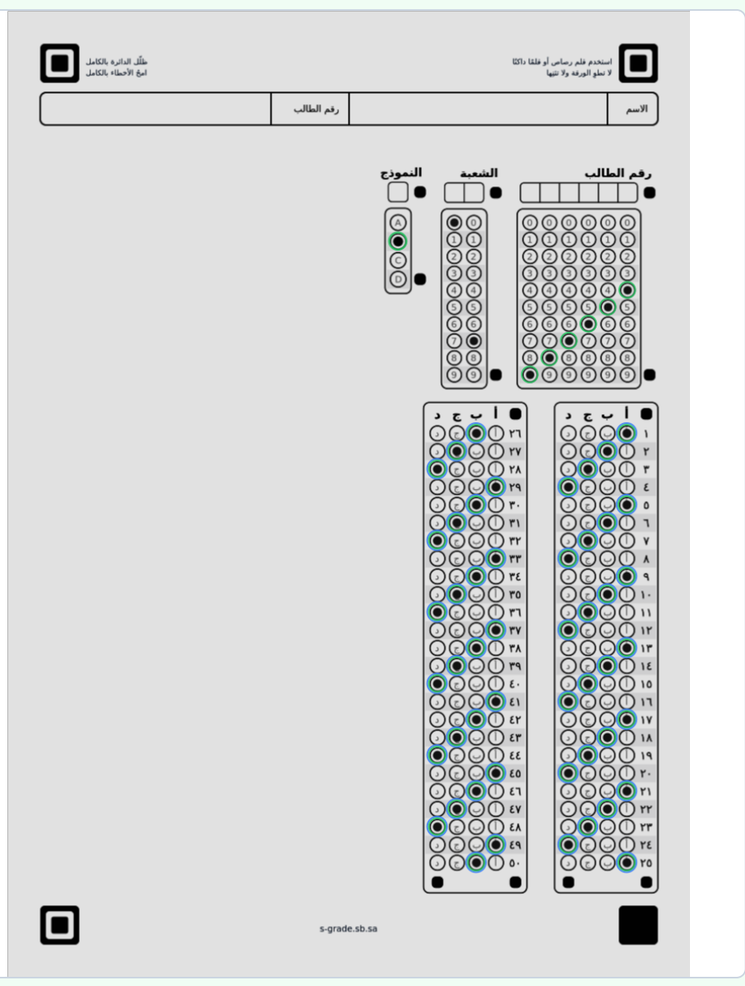
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



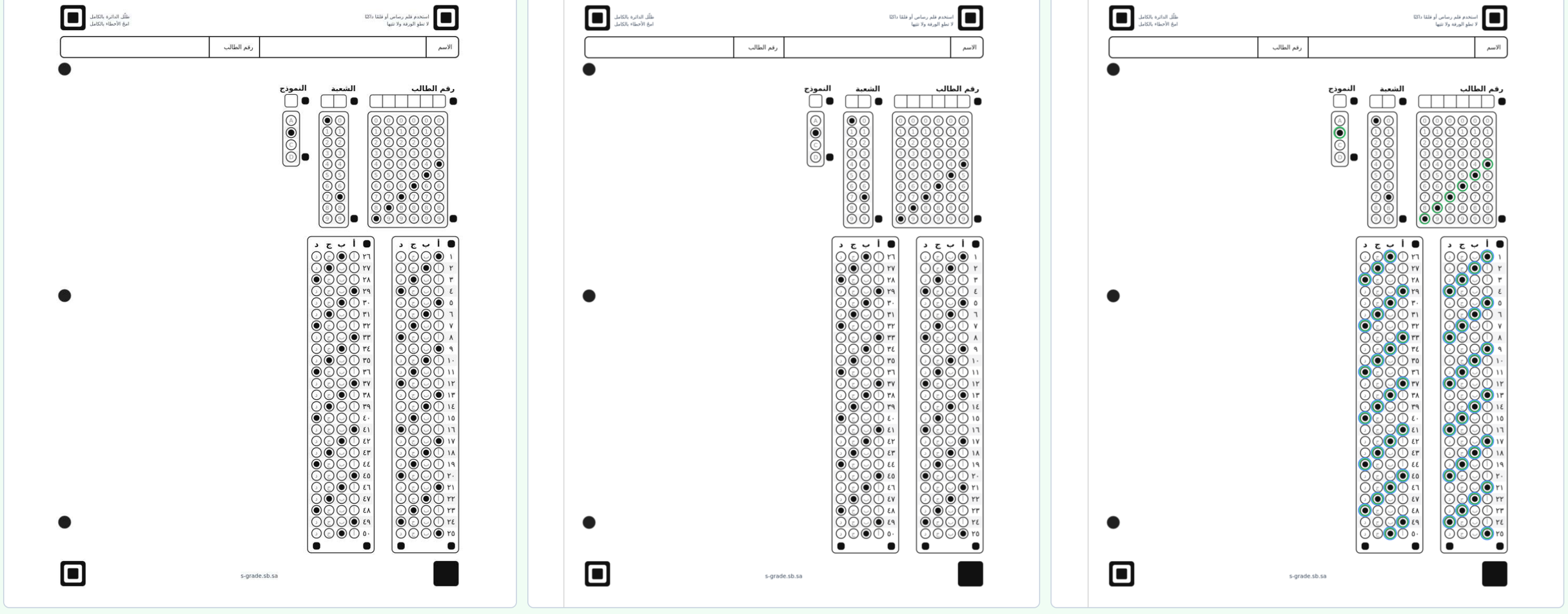
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · three-hole punch holes PASS

profile: `three_hole_punch` · 574 passed · 0 failed



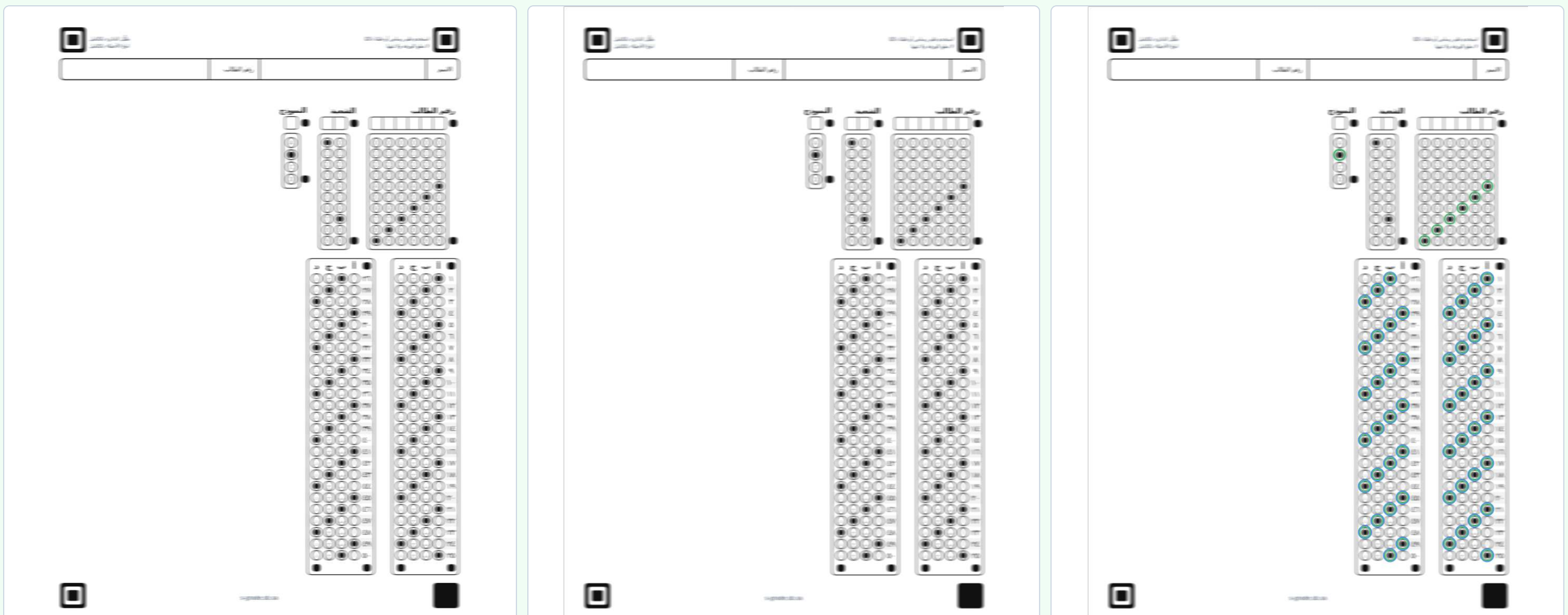
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · motion blur (horizontal) PASS

profile: `motion_blur` · 574 passed · 0 failed



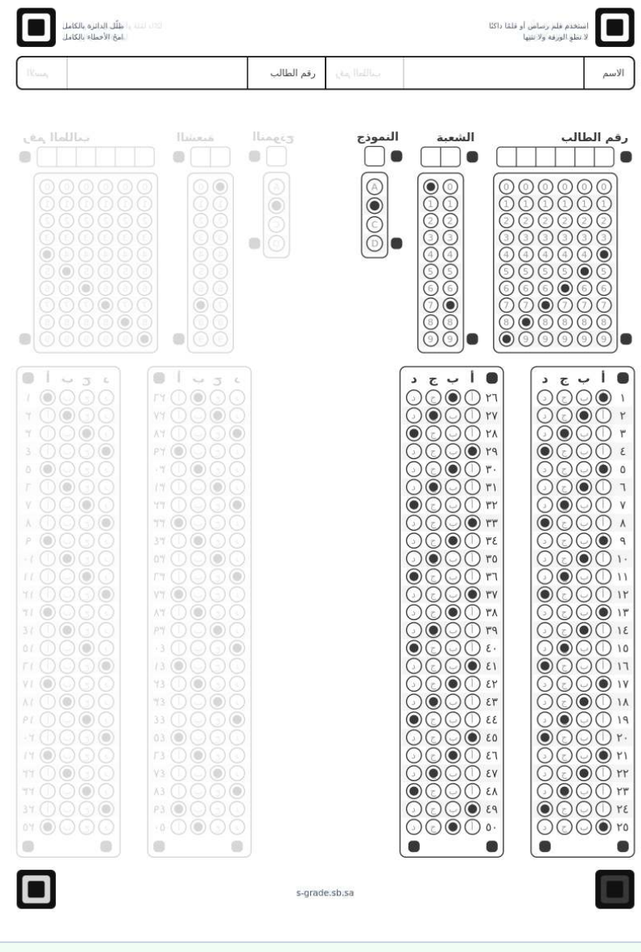
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

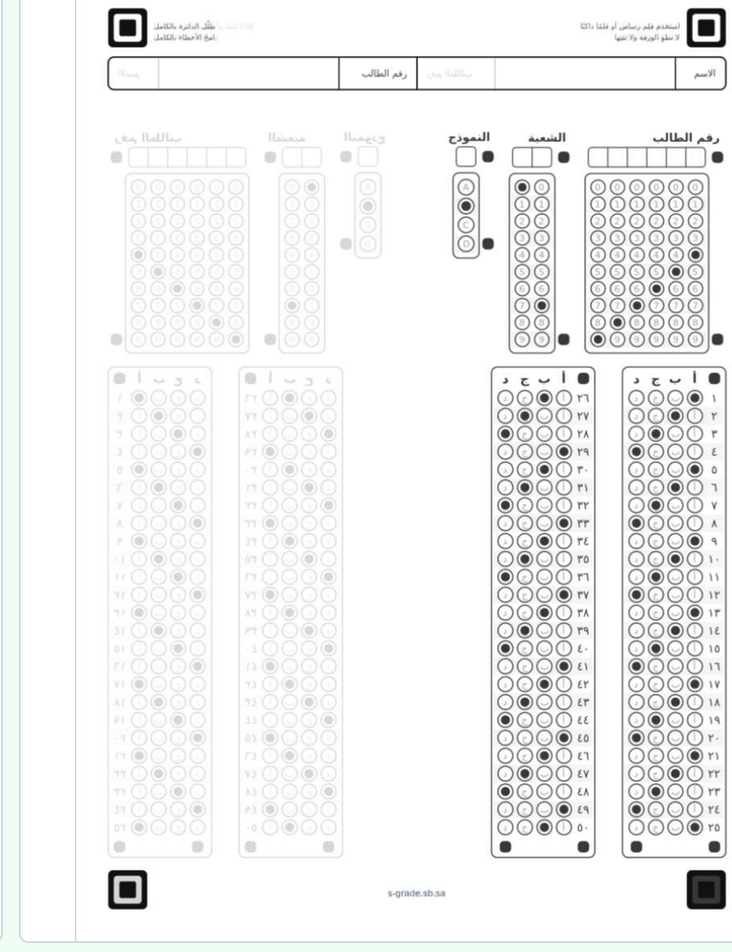
result.json

[AR] 50q · show-through from back of sheet PASS

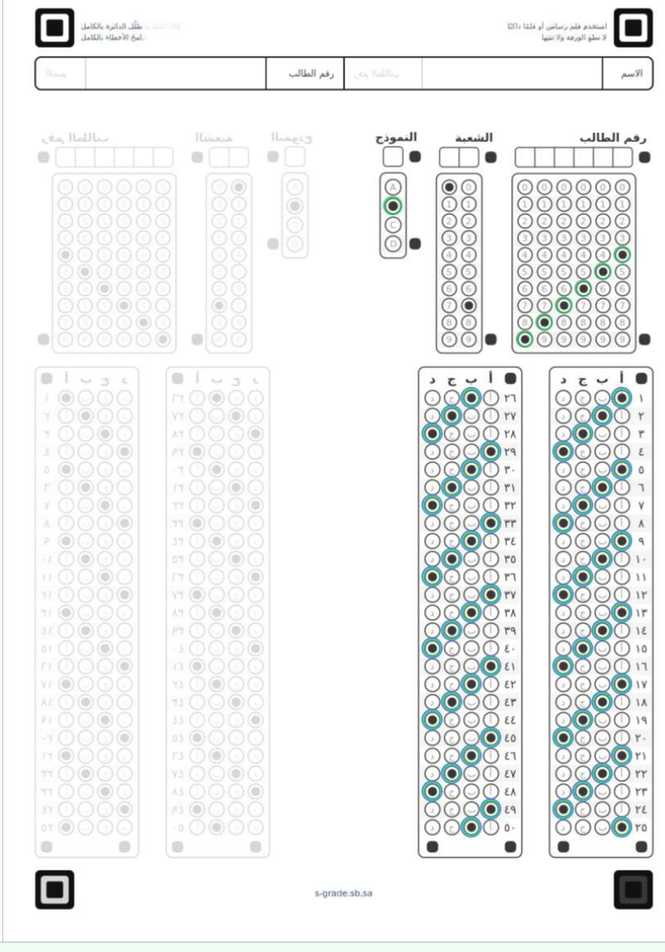
profile: `show_through` · 574 passed · 0 failed



INPUT



WARPED



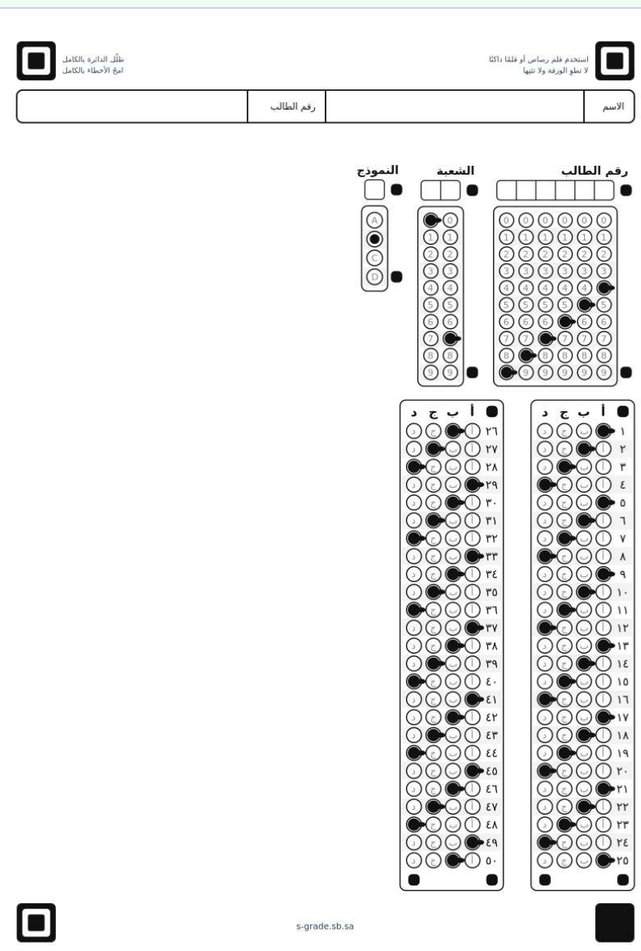
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

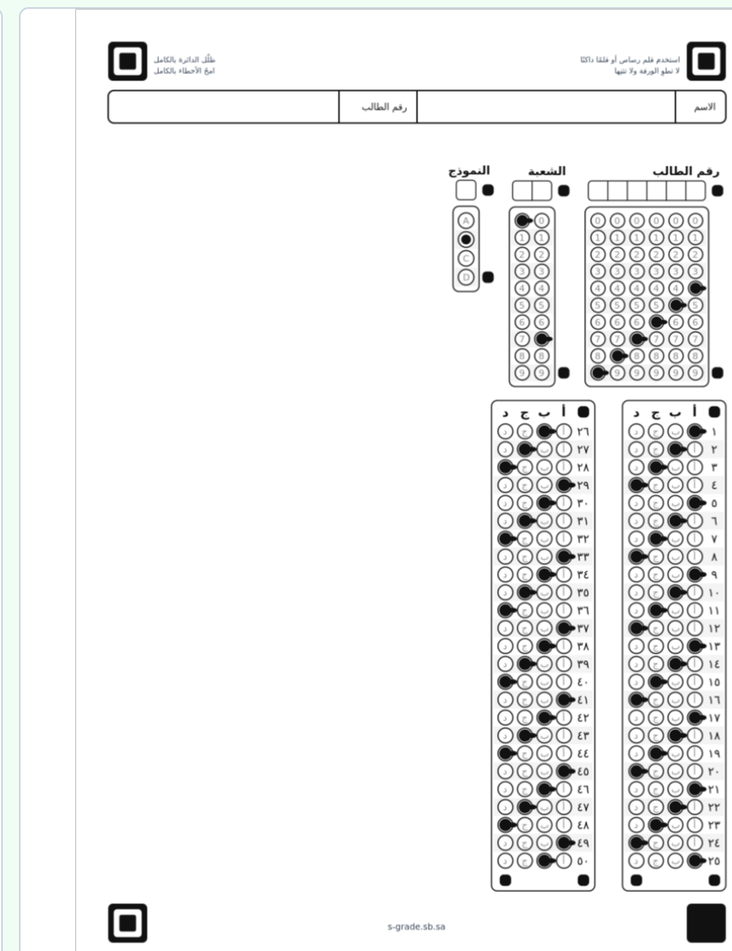
result.json

[AR] 50q · over-fill bleed past edge PASS

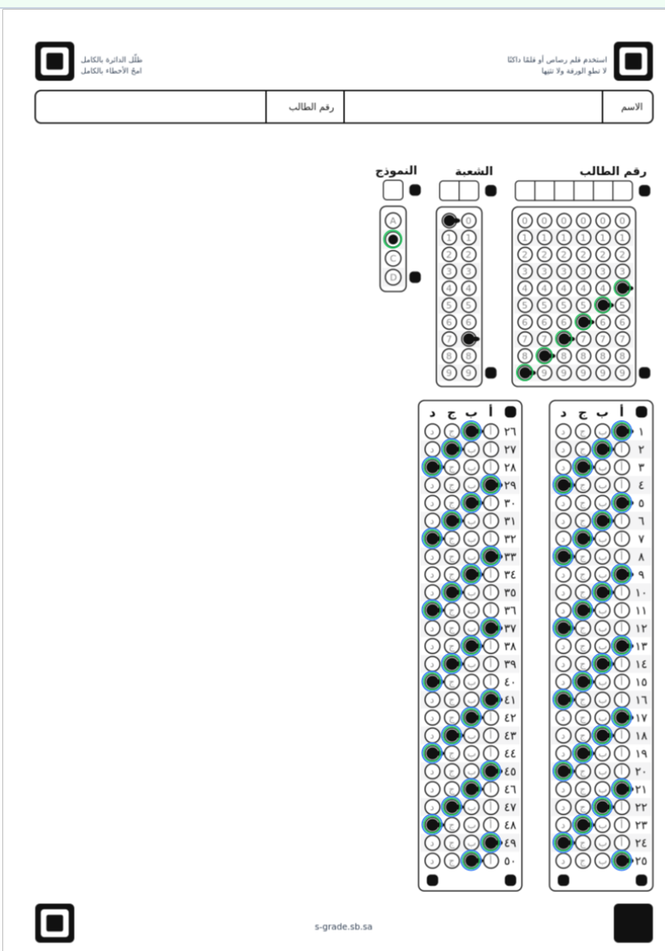
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



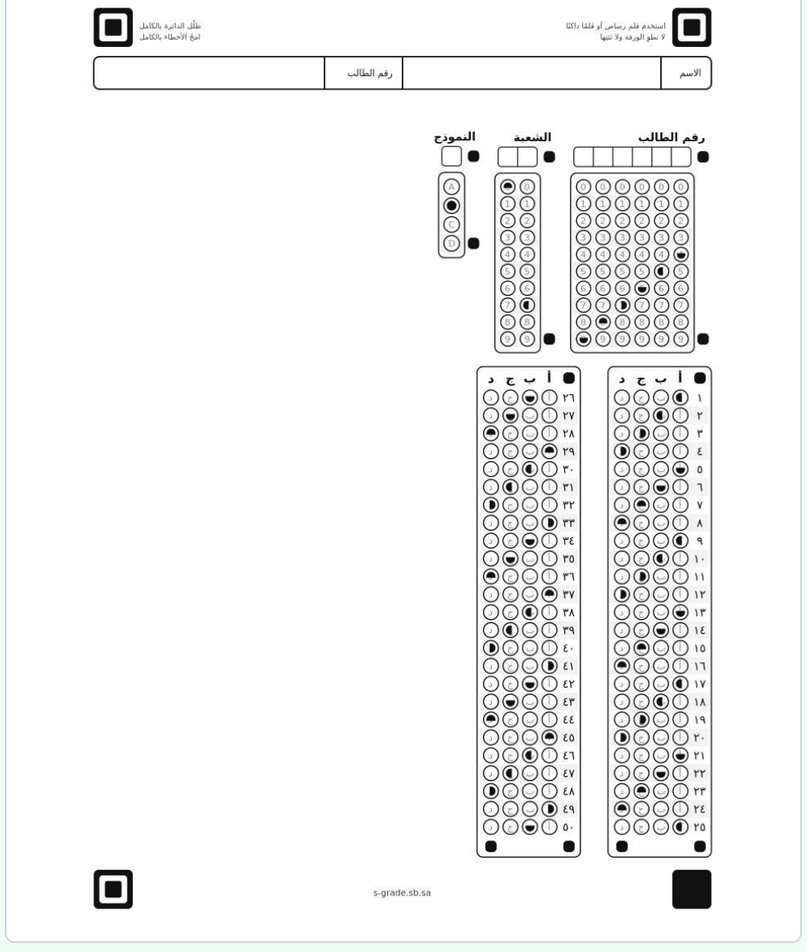
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

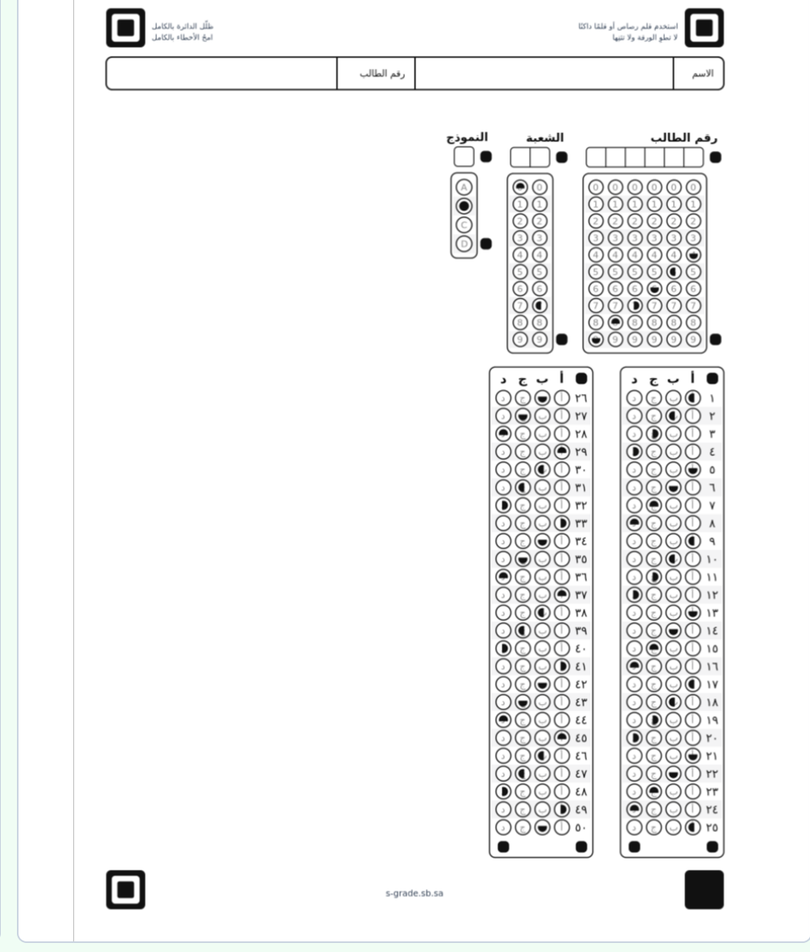
result.json

[AR] 50q · partial (under-) fill PASS

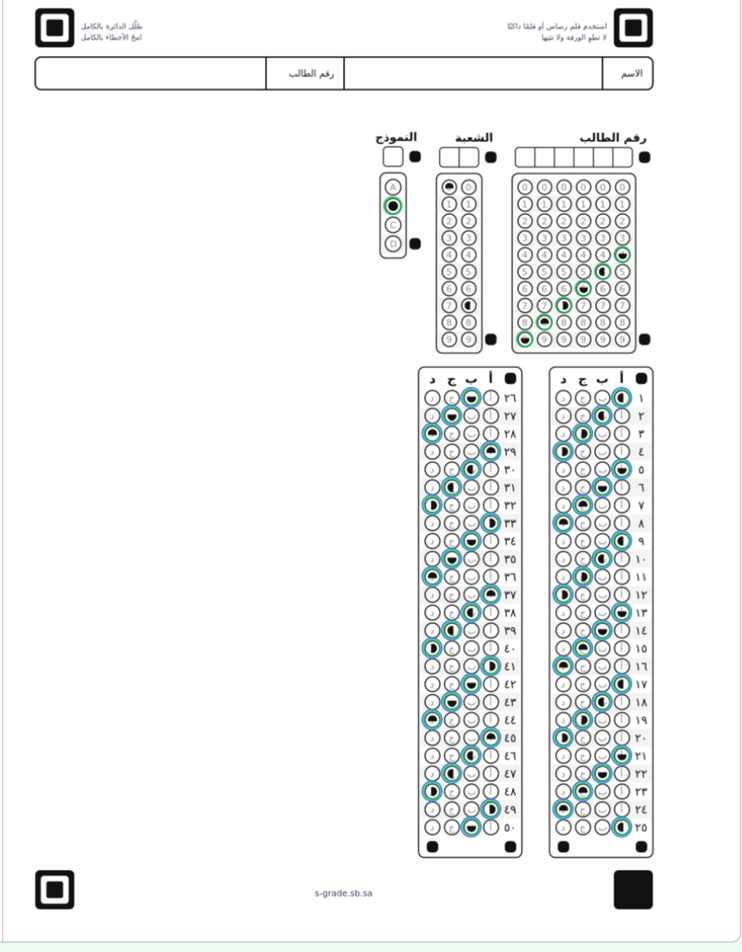
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



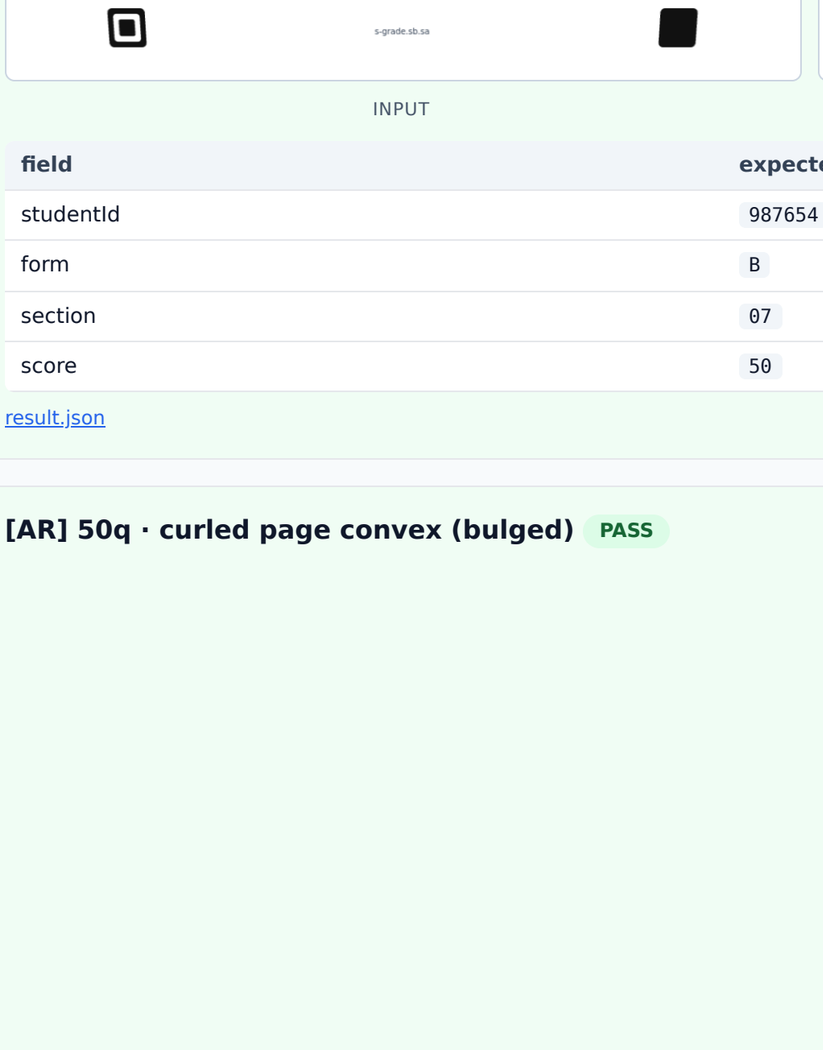
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

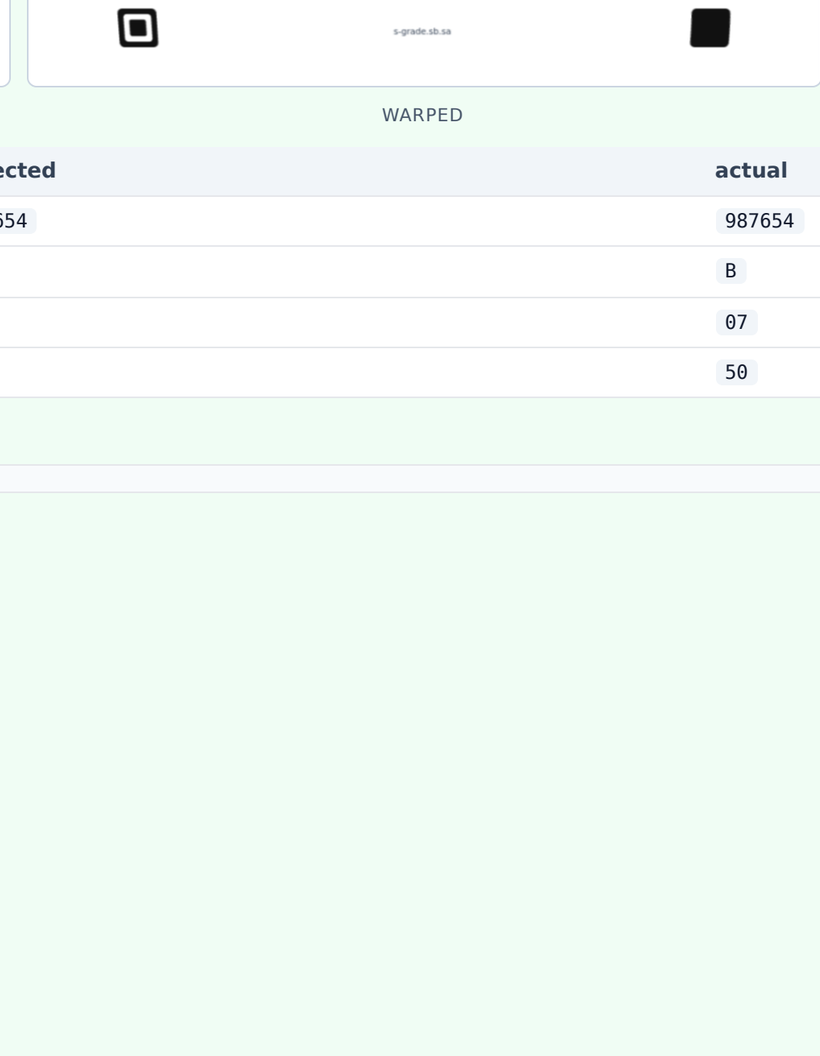
result.json

[AR] 50q · curled page (non-planar) PASS

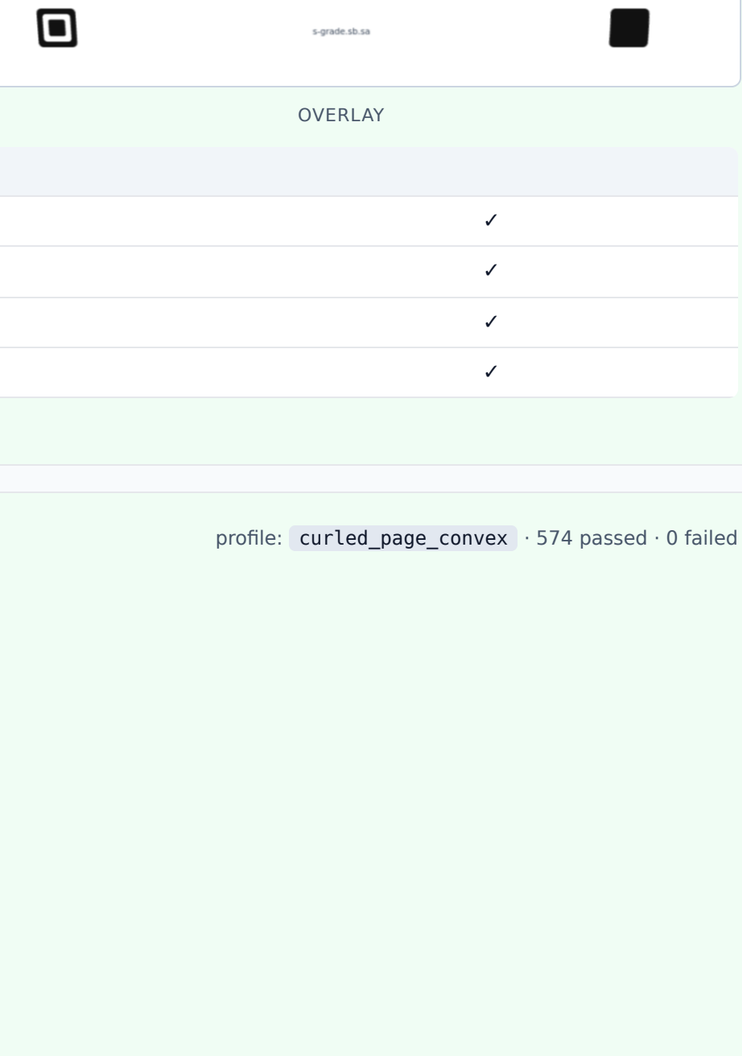
profile: `curled_page` · 574 passed · 0 failed



INPUT



WARPED



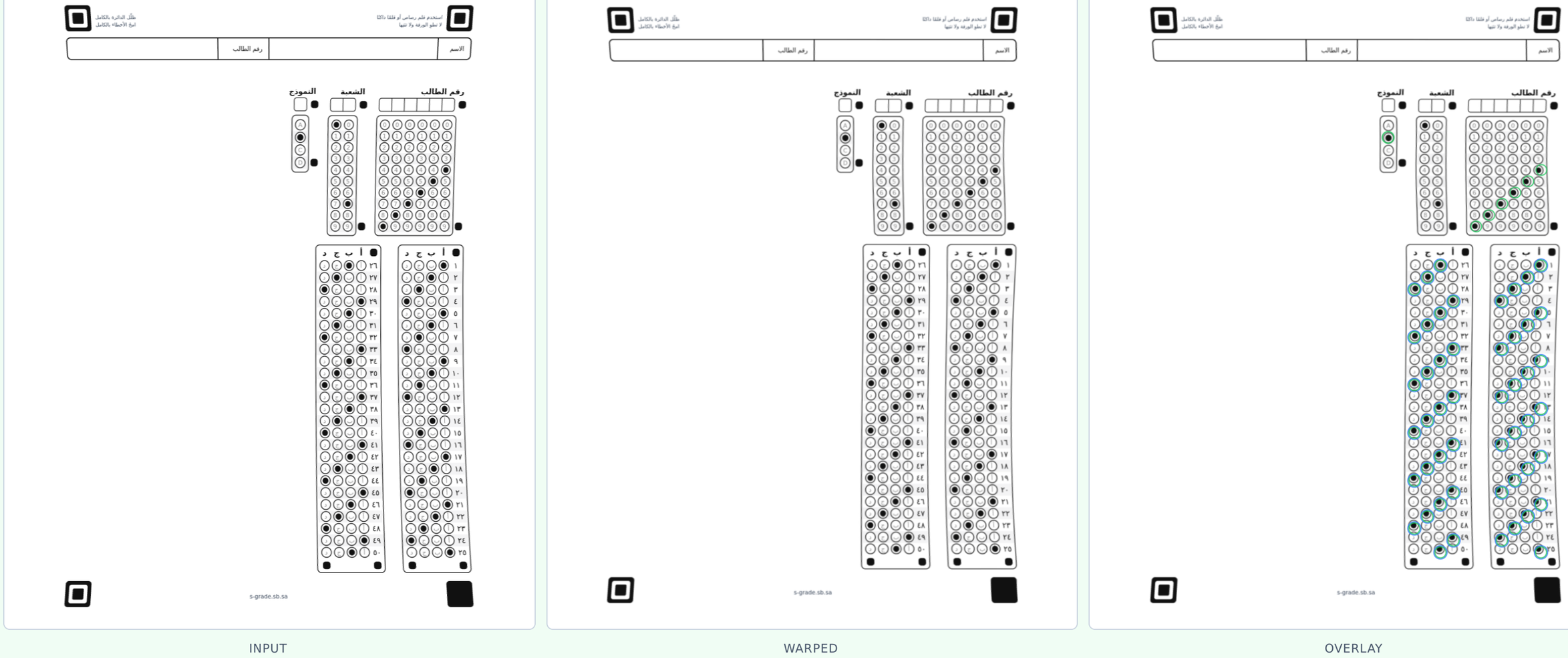
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · curled page convex (bulged) PASS

profile: `curled_page_convex` · 574 passed · 0 failed



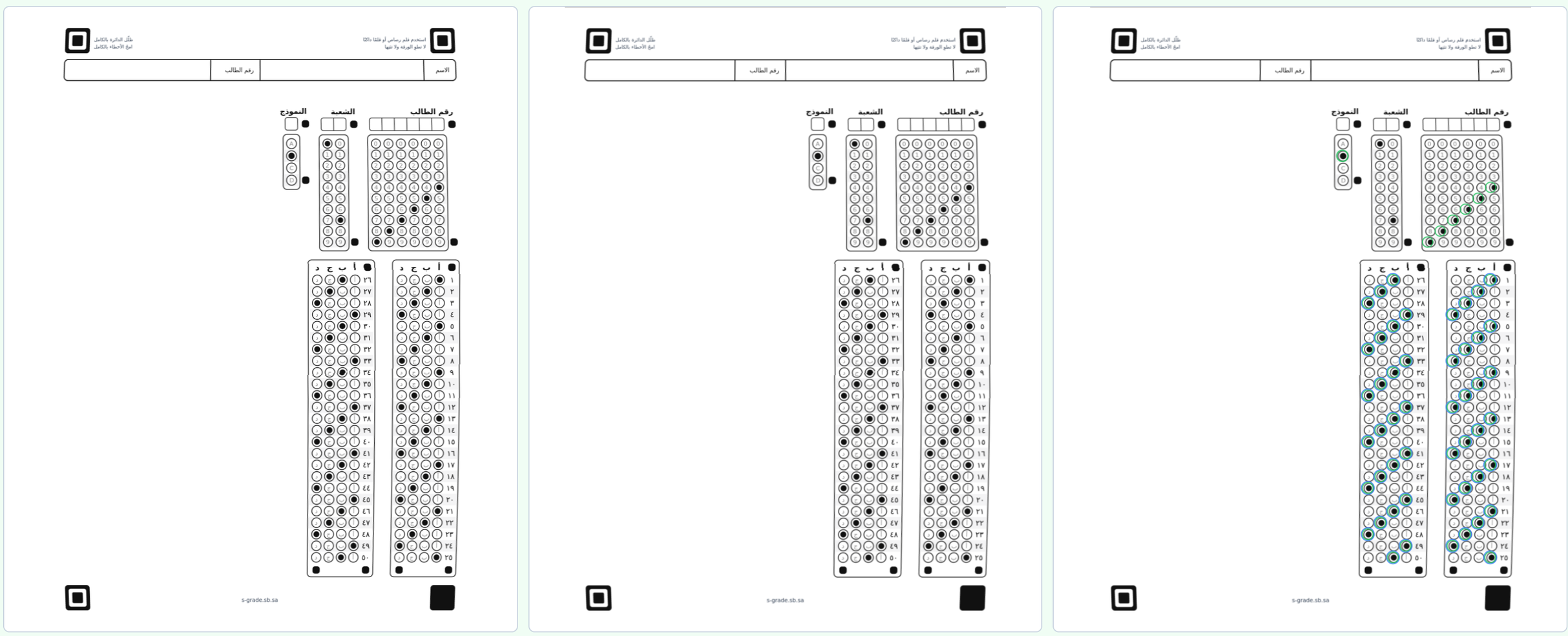
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

result.json

[AR] 50q · curled page MILD (lying on soft surface) PASS

profile: `curled_page_mild` · 574 passed · 0 failed



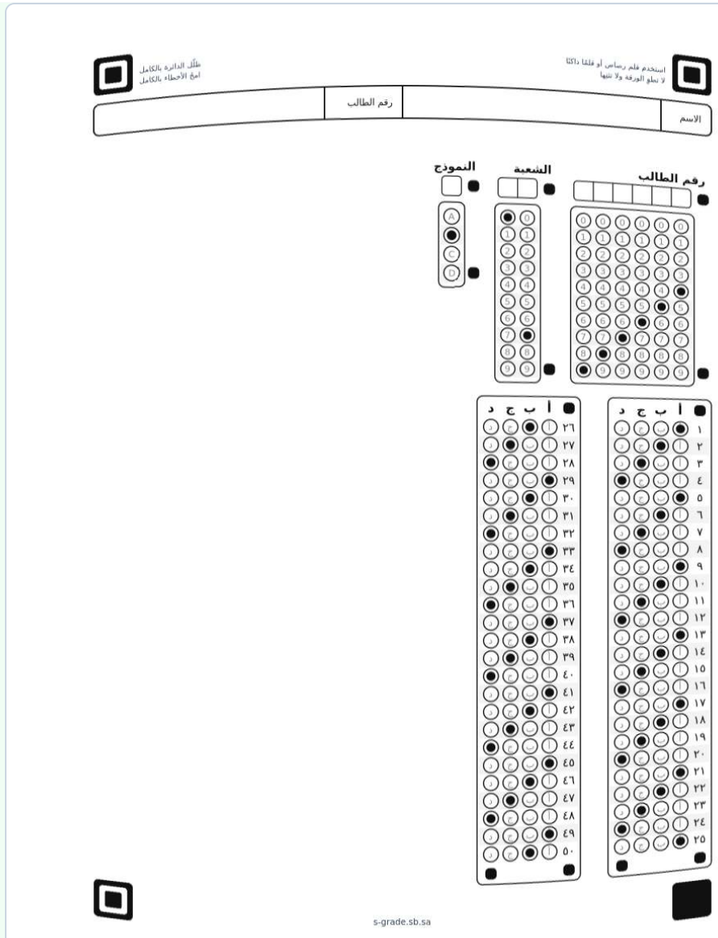
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

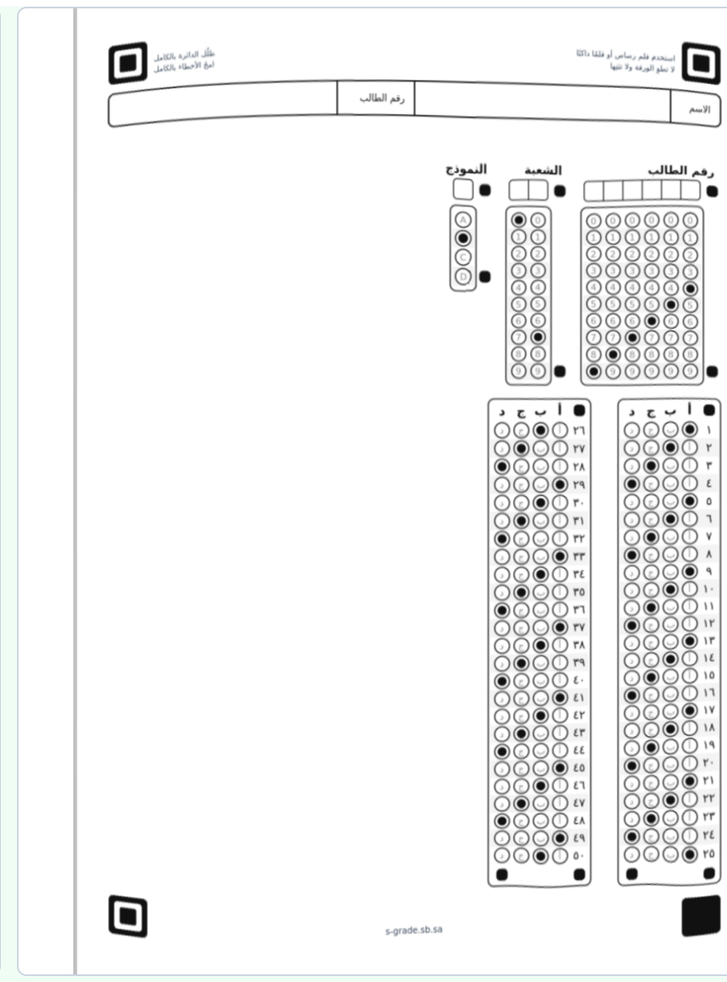
result.json

[AR] 50q · curled page horizontal axis PASS

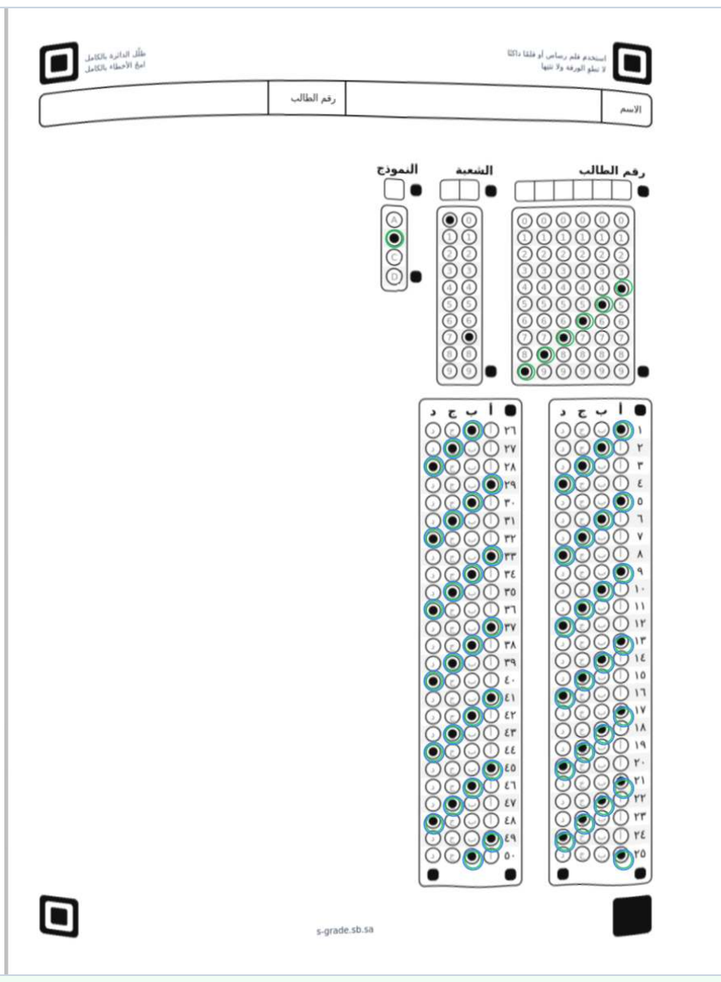
profile: `curled_page_horizontal` · 574 passed · 0 failed



INPUT



WARPED



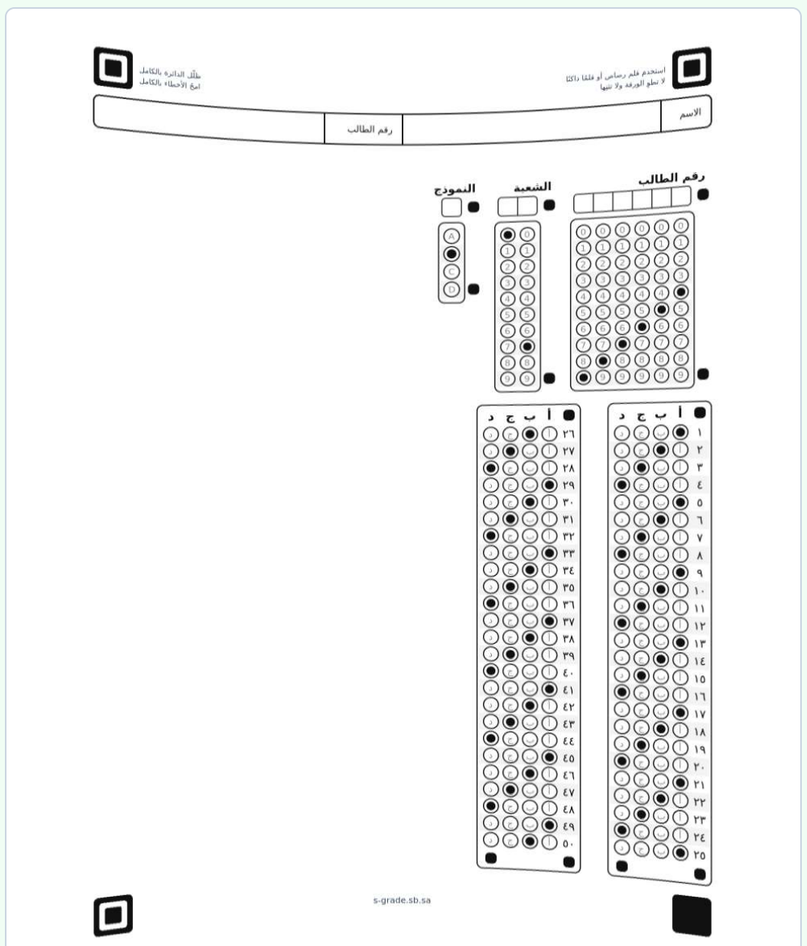
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

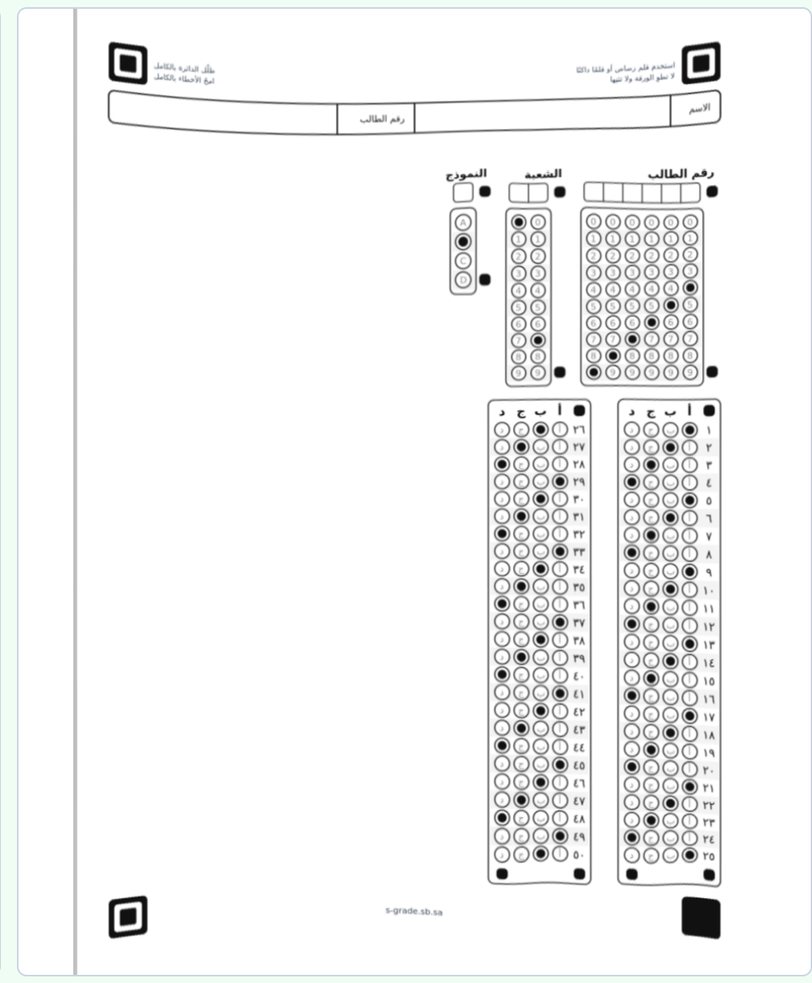
result.json

[AR] 50q · curled page horizontal axis (convex) PASS

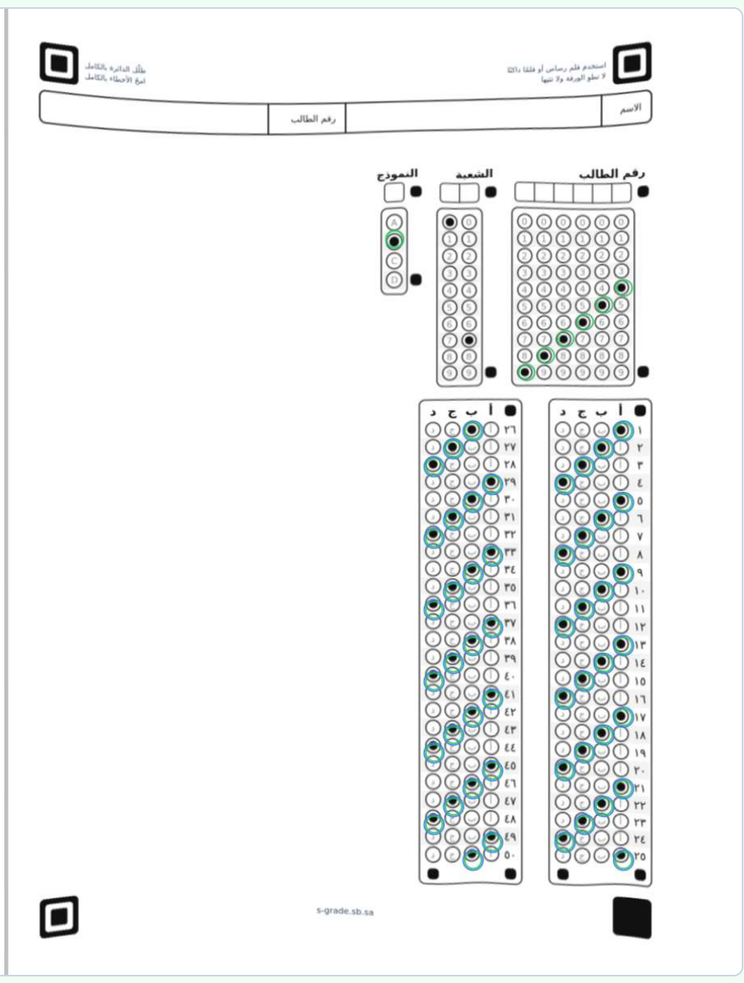
profile: `curled_page_horizontal_convex` · 574 passed · 0 failed



INPUT



WARPED



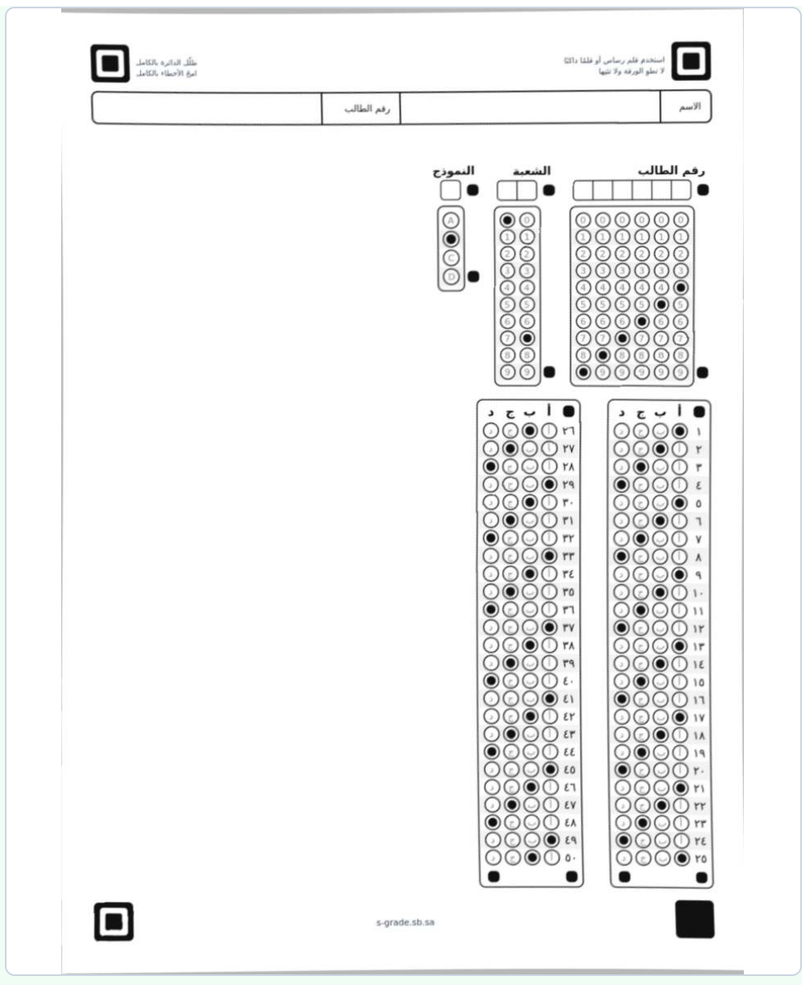
OVERLAY

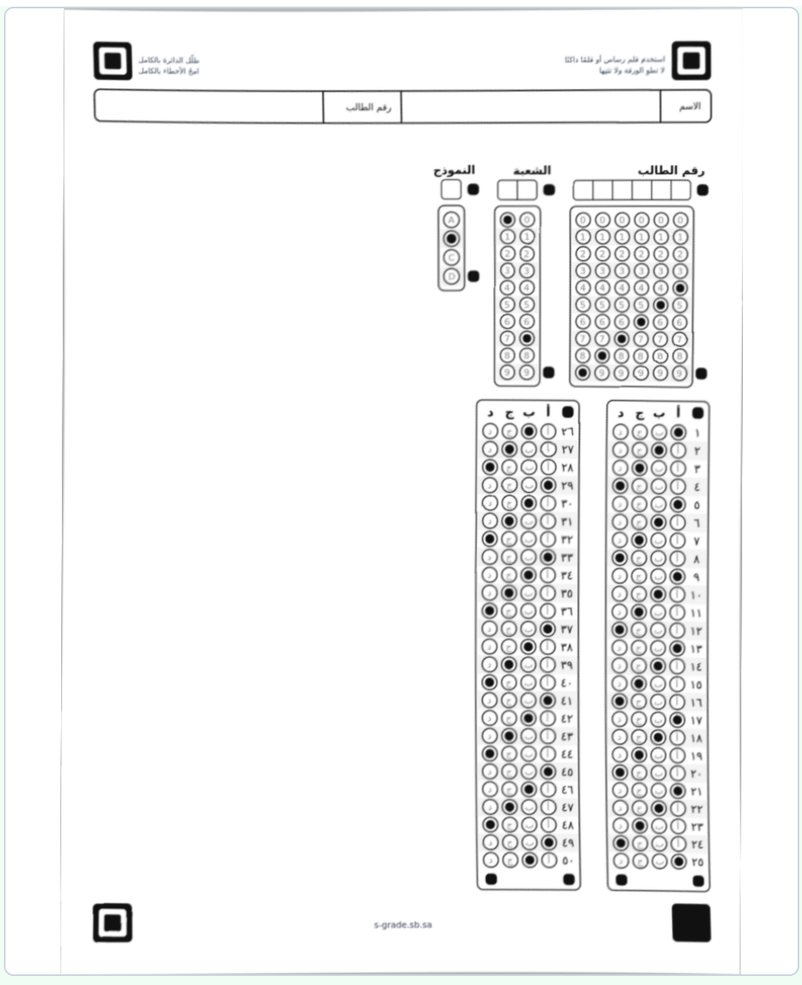
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

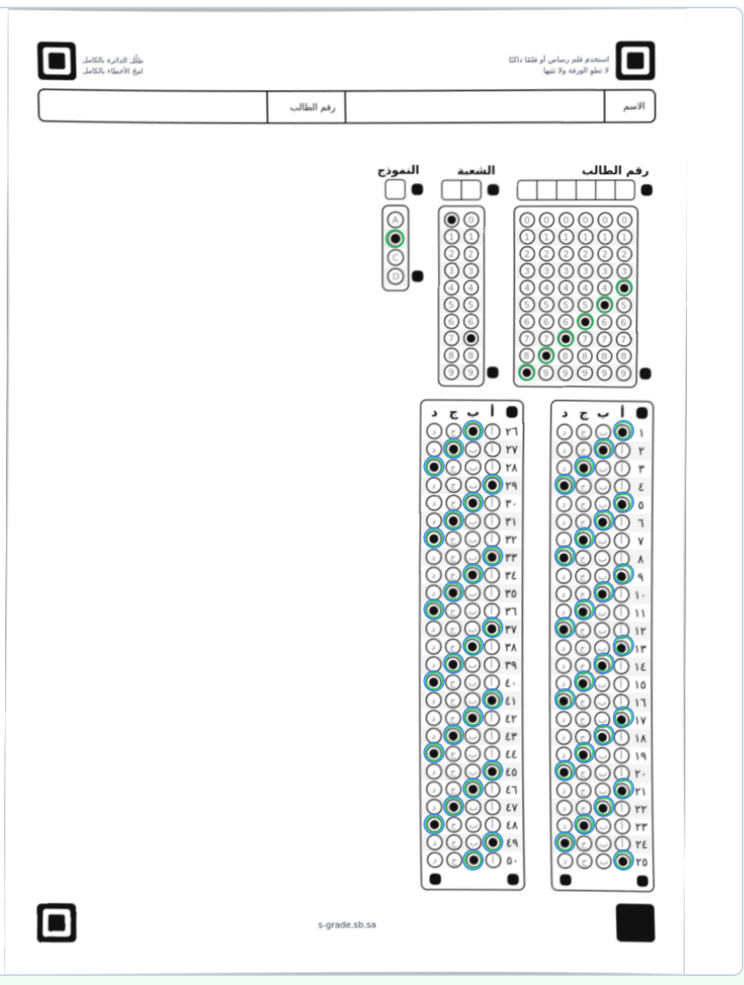
result.json

[AR] 50q · curled page diagonal axis PASS

profile: `curled_page_diagonal` · 574 passed · 0 failed







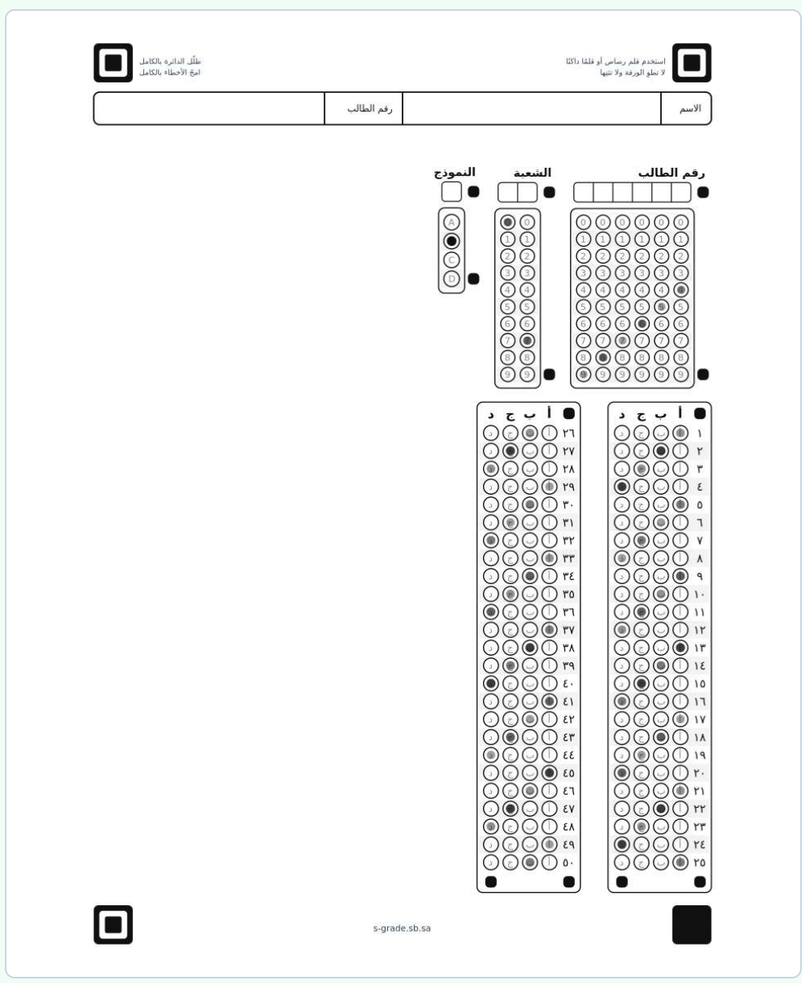
INPUT WARPED OVERLAY

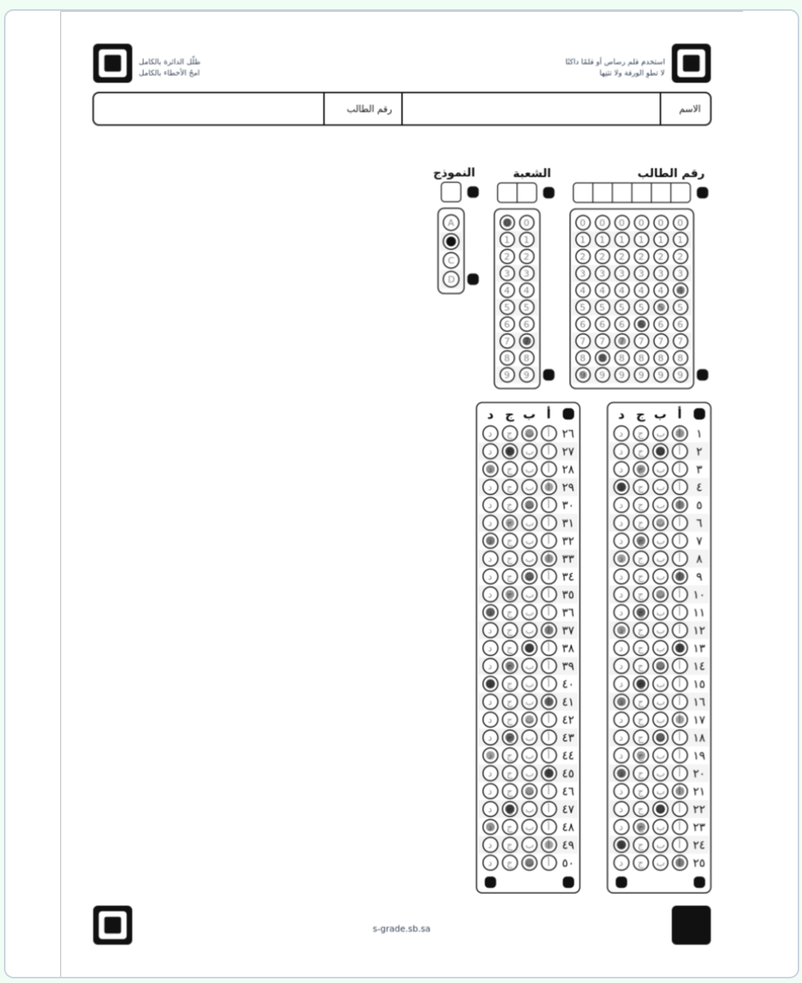
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

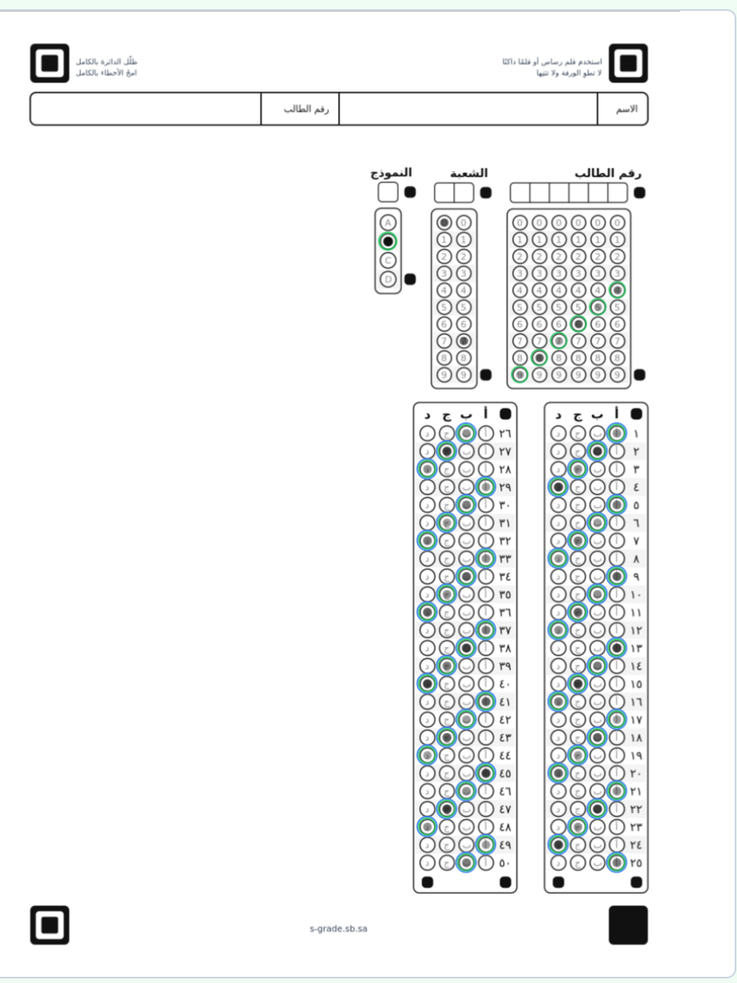
result.json

[AR] 50q · mixed pencil darkness PASS

profile: `pristine` · 574 passed · 0 failed







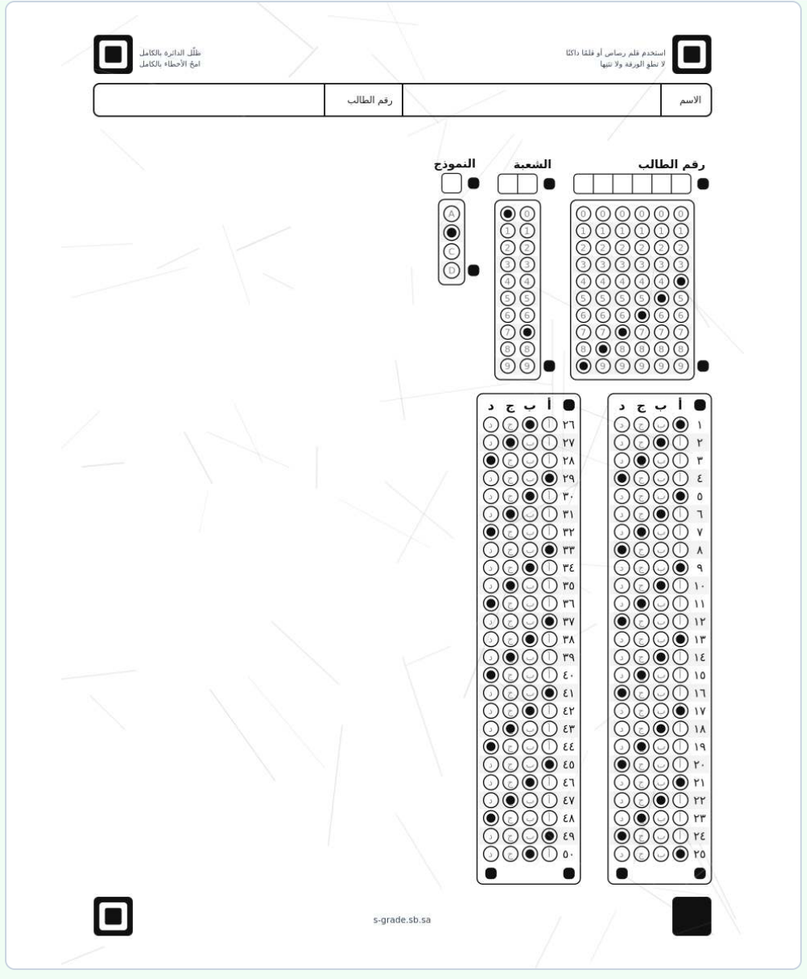
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

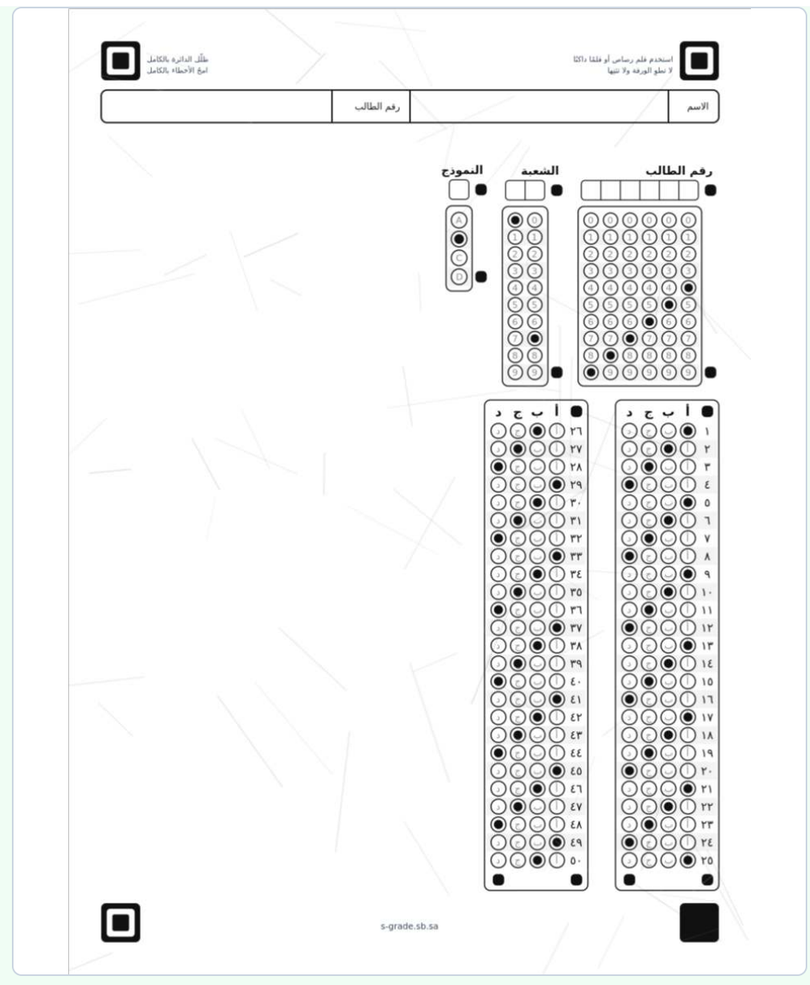
result.json

[AR] 50q · wrinkled / crumpled sheet PASS

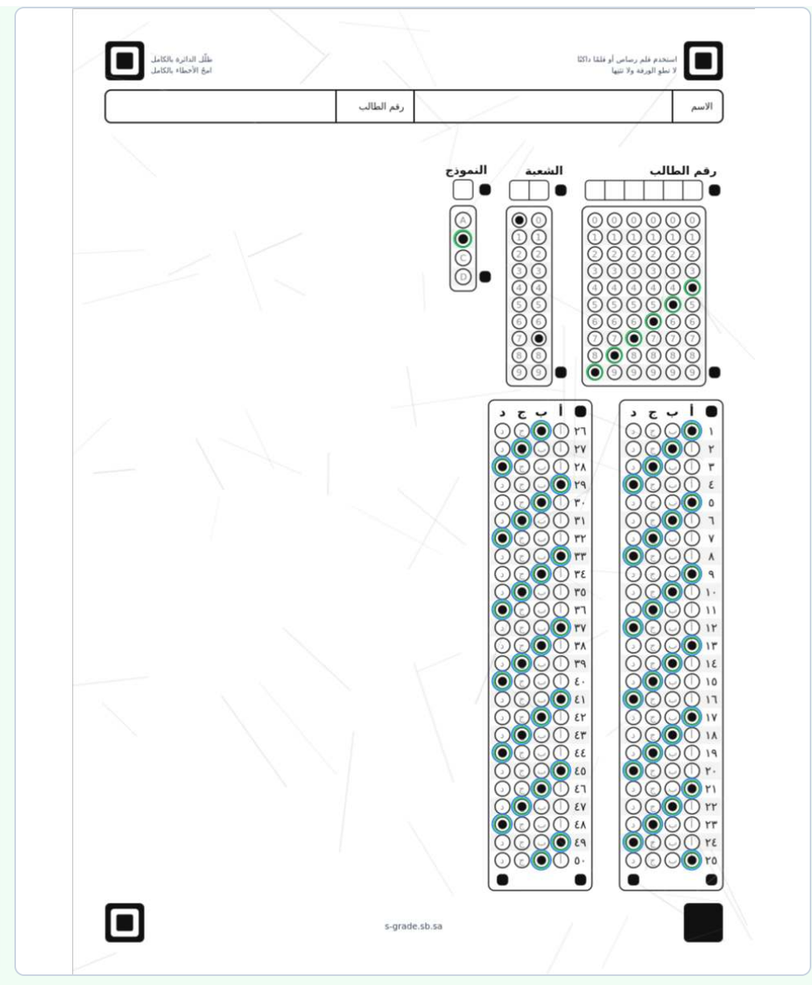
profile: `wrinkled` · 574 passed · 0 failed



INPUT



WARPED



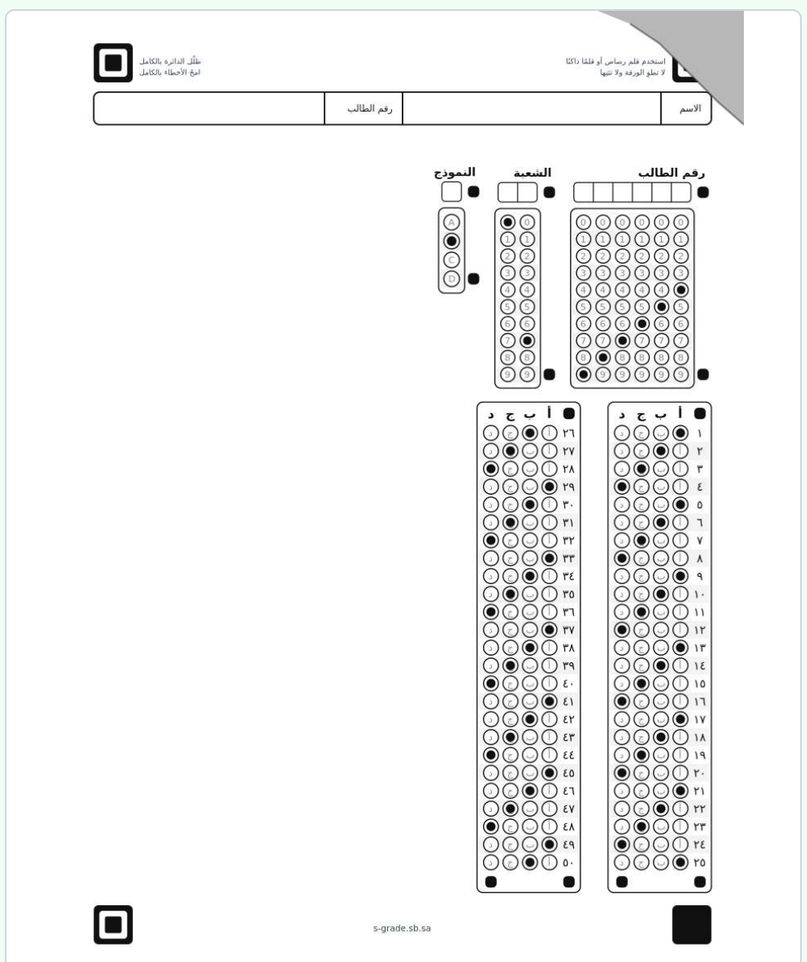
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

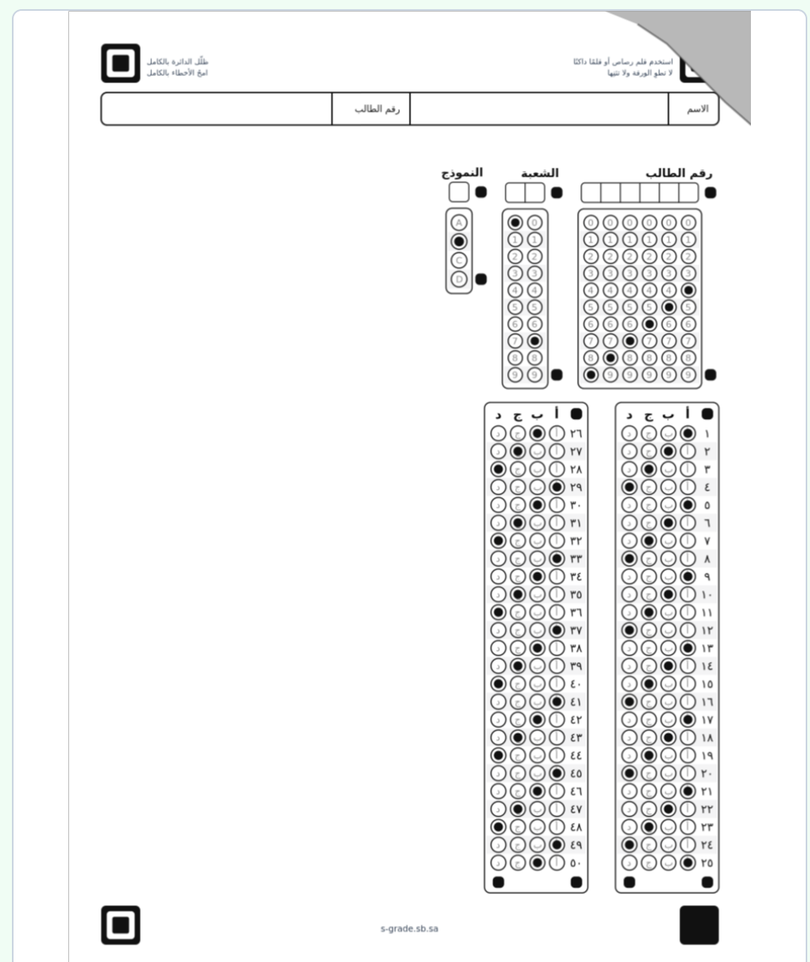
result.json

[AR] 50q · torn corner (TR fiducial missing) PASS

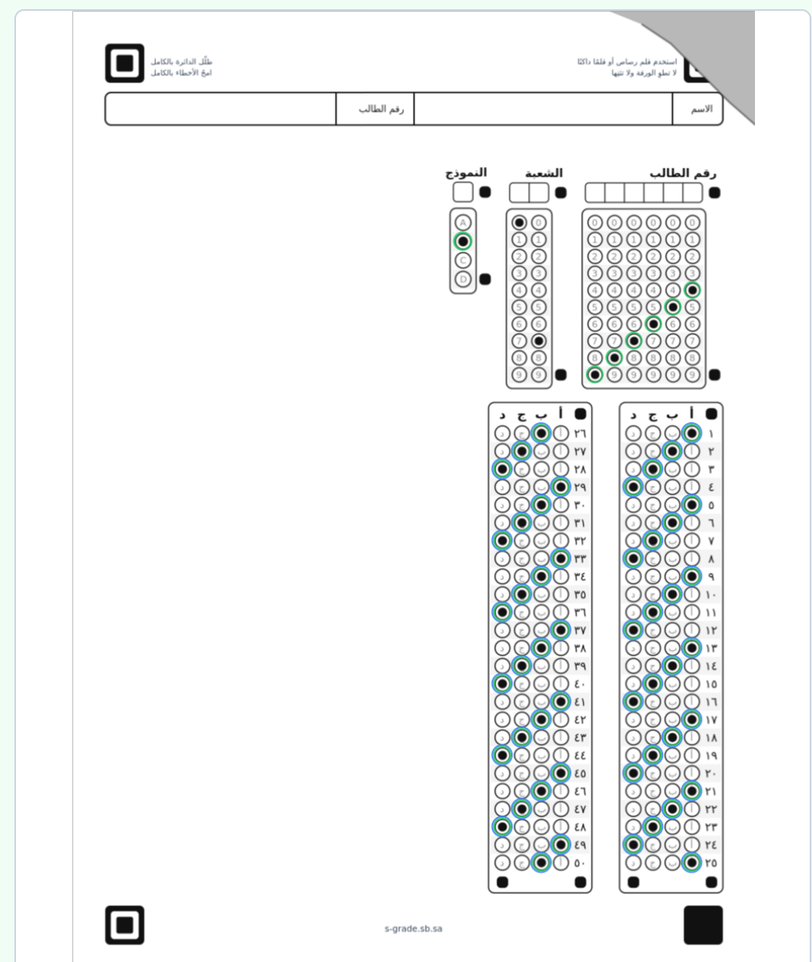
profile: `torn_corner_tr` · 574 passed · 0 failed



INPUT



WARPED



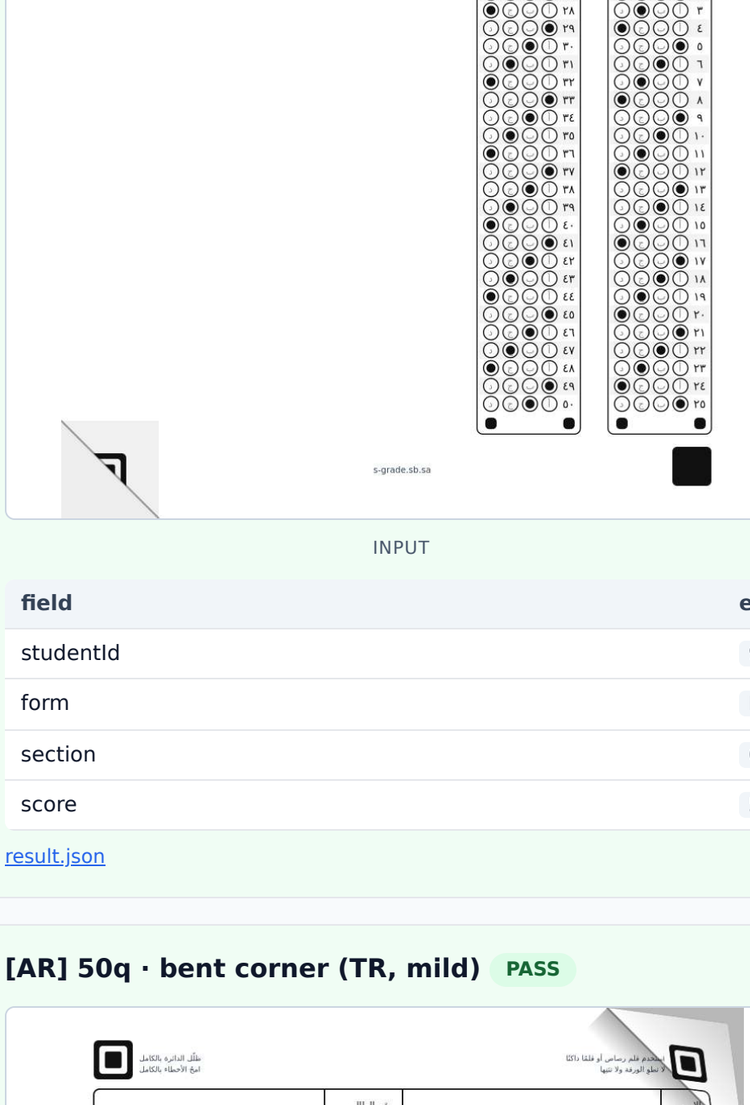
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

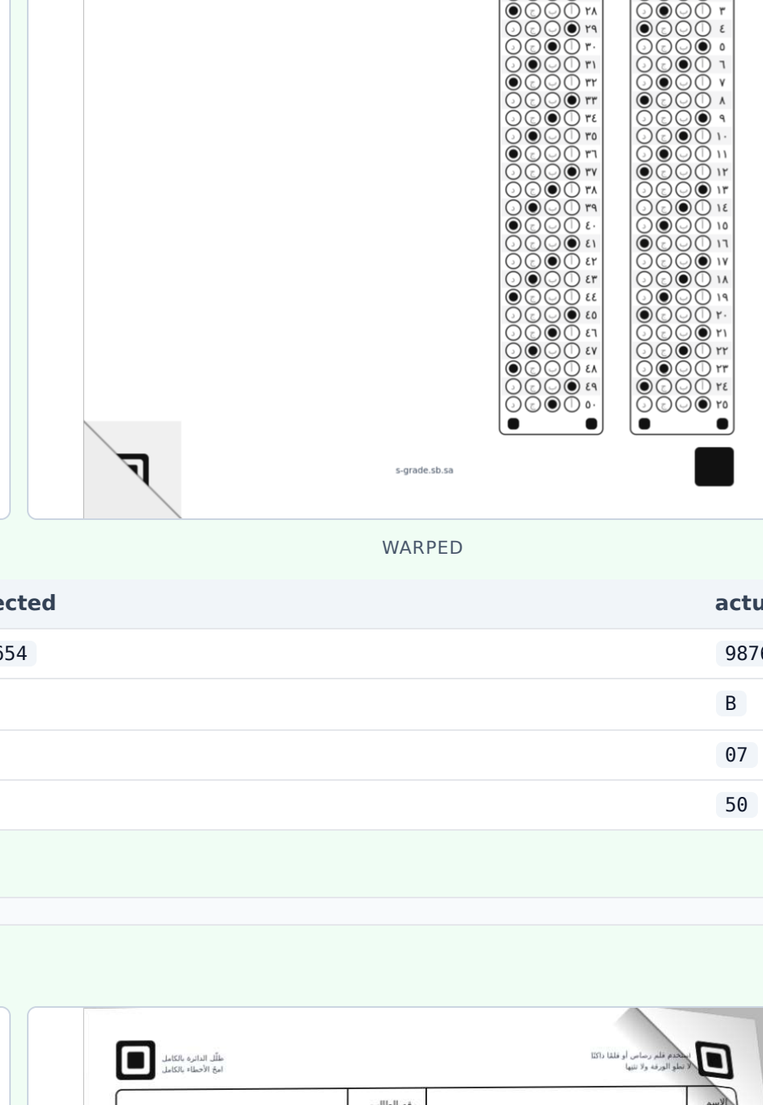
result.json

[AR] 50q · dog-eared corner (BL) PASS

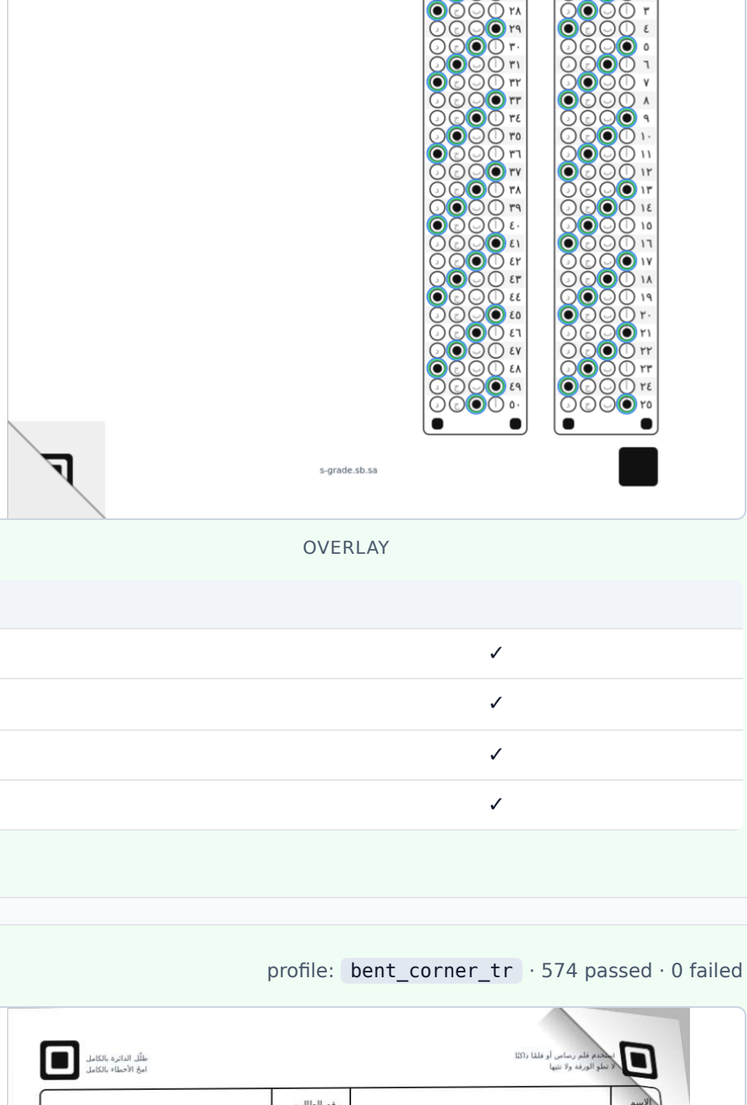
profile: `dog_eared_bl` · 574 passed · 0 failed



INPUT



WARPED



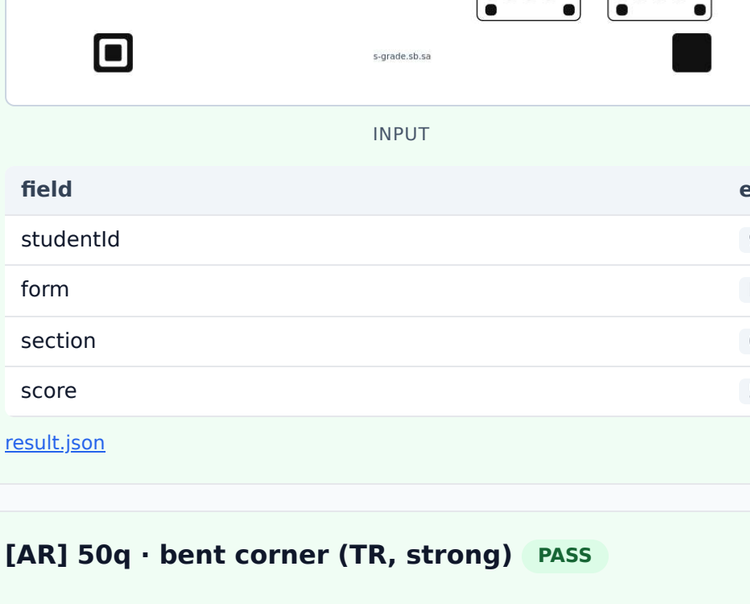
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

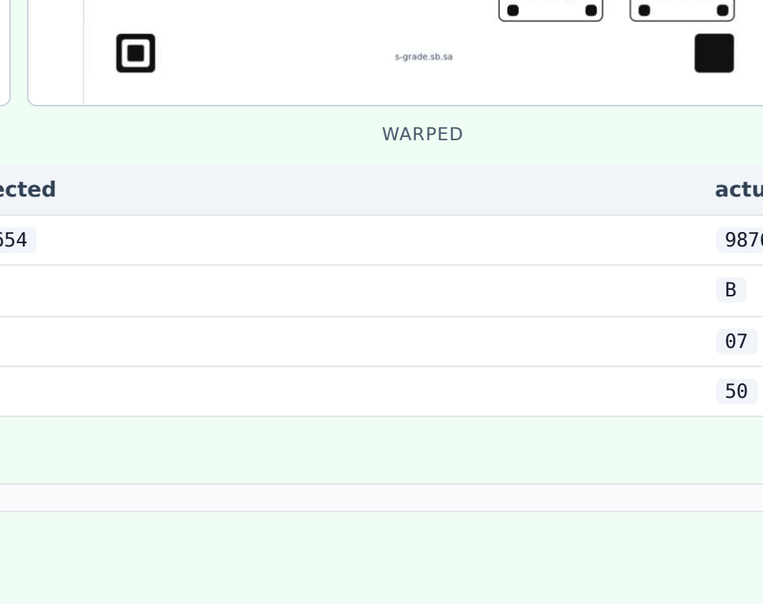
result.json

[AR] 50q · bent corner (TR, mild) PASS

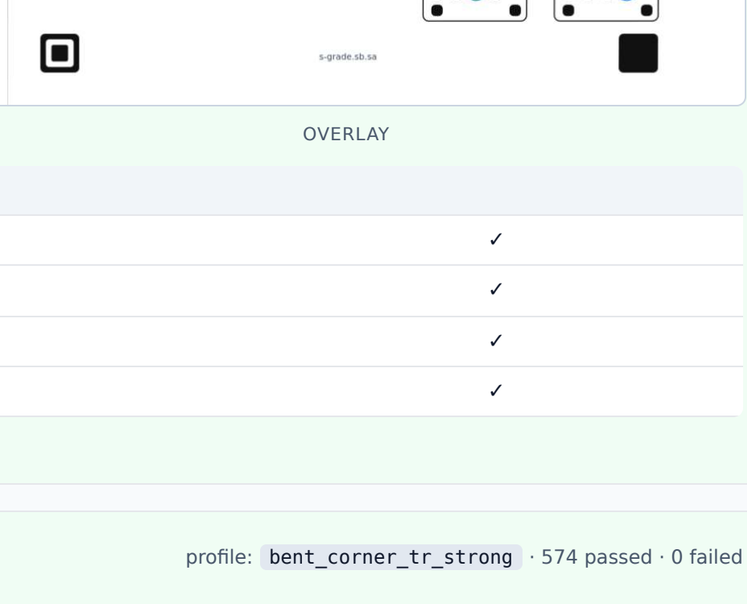
profile: `bent_corner_tr` · 574 passed · 0 failed



INPUT



WARPED



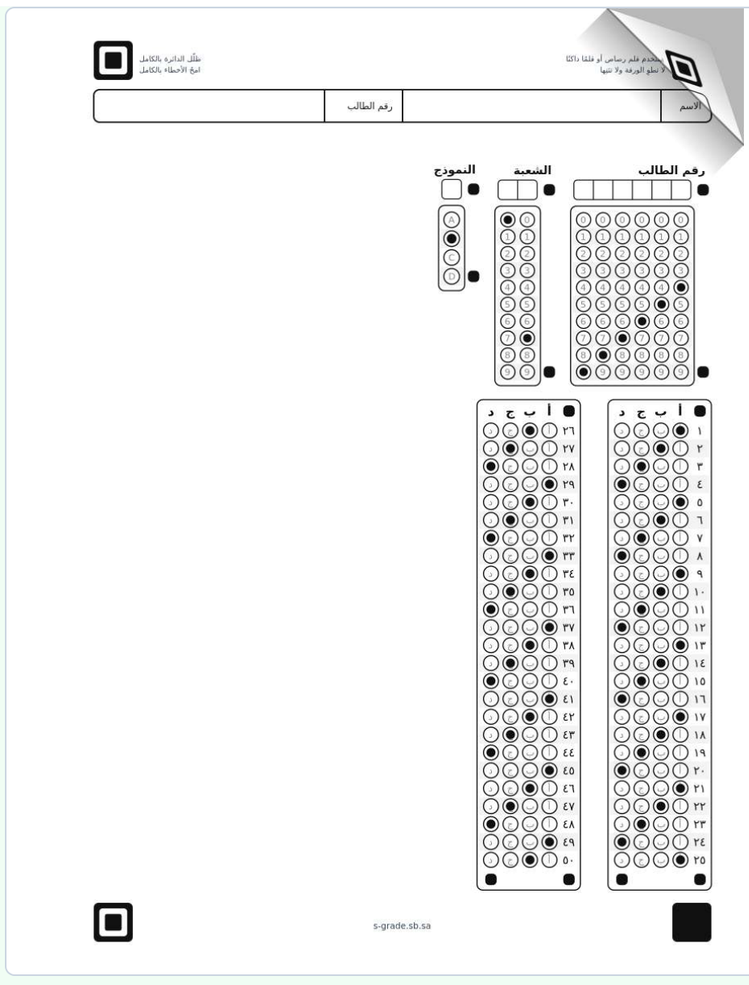
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

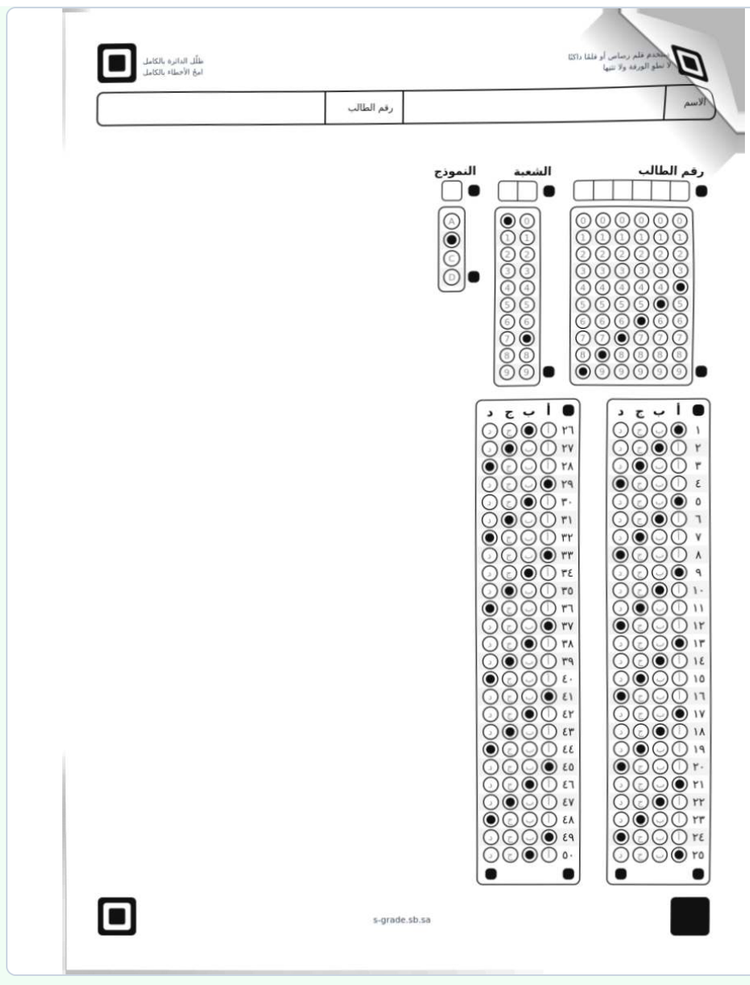
result.json

[AR] 50q · bent corner (TR, strong) PASS

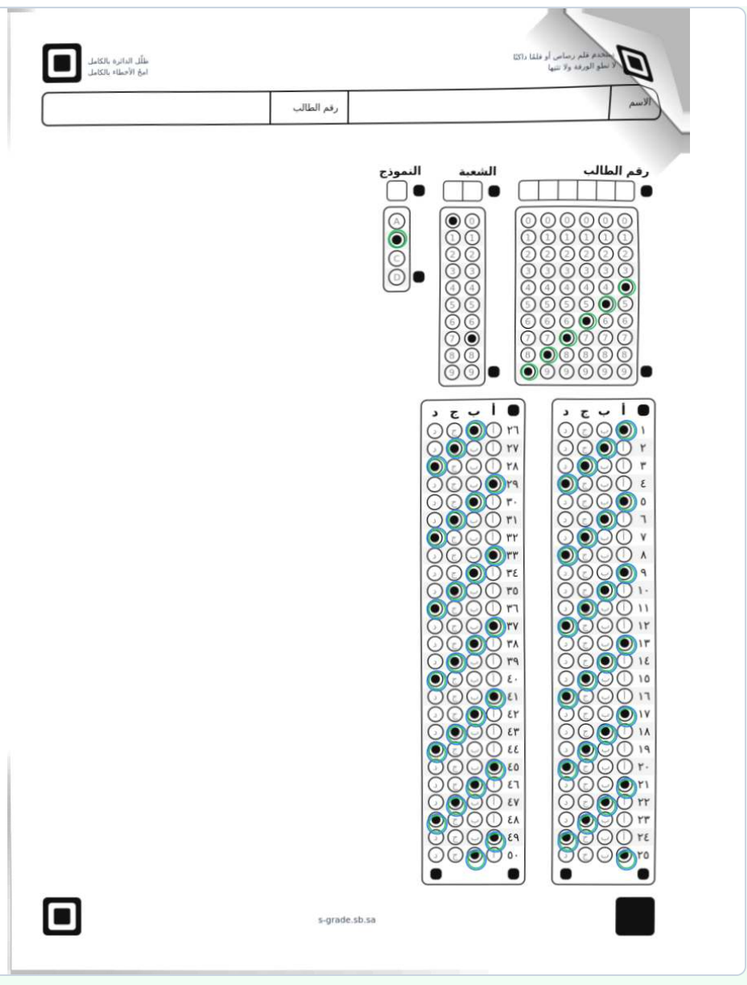
profile: `bent_corner_tr_strong` · 574 passed · 0 failed



INPUT



WARPED



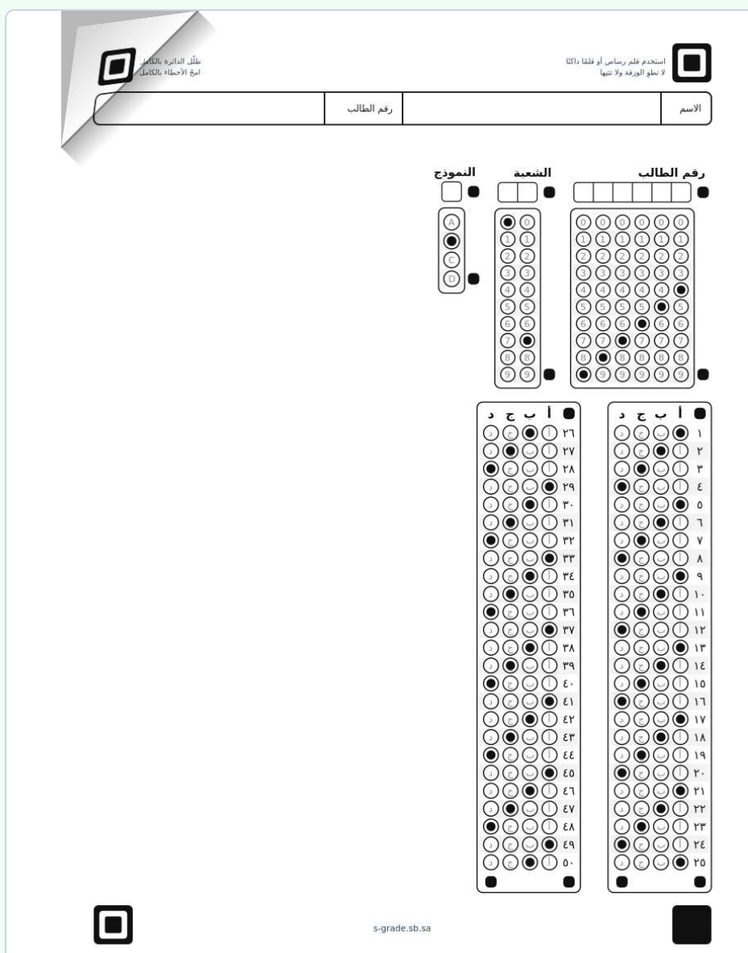
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

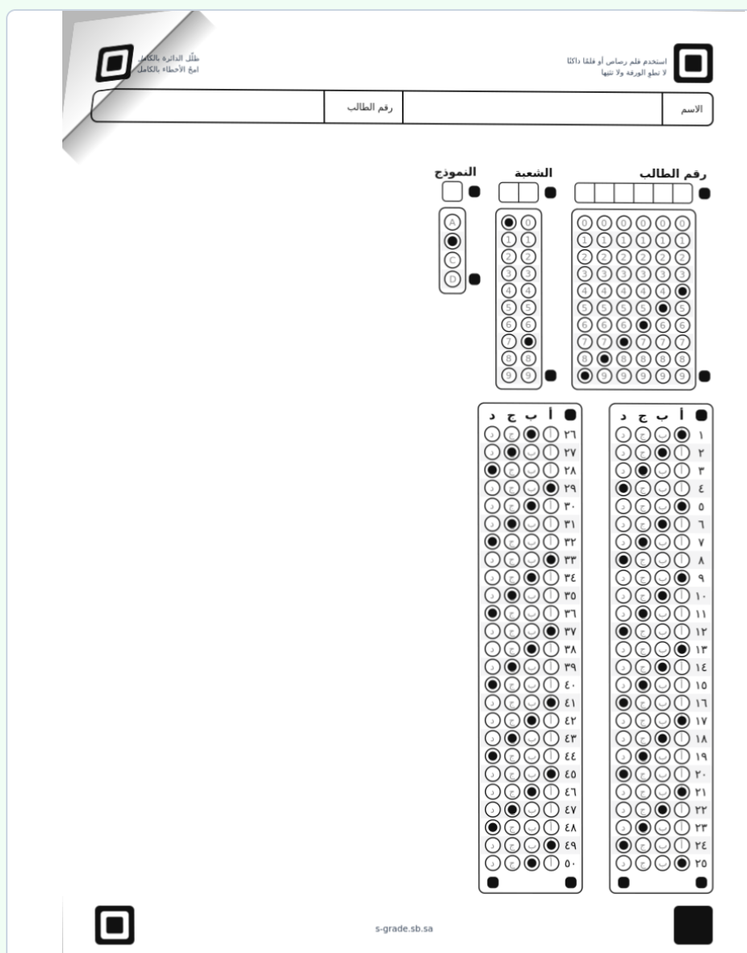
result.json

[AR] 50q · bent corner (TL, mild) PASS

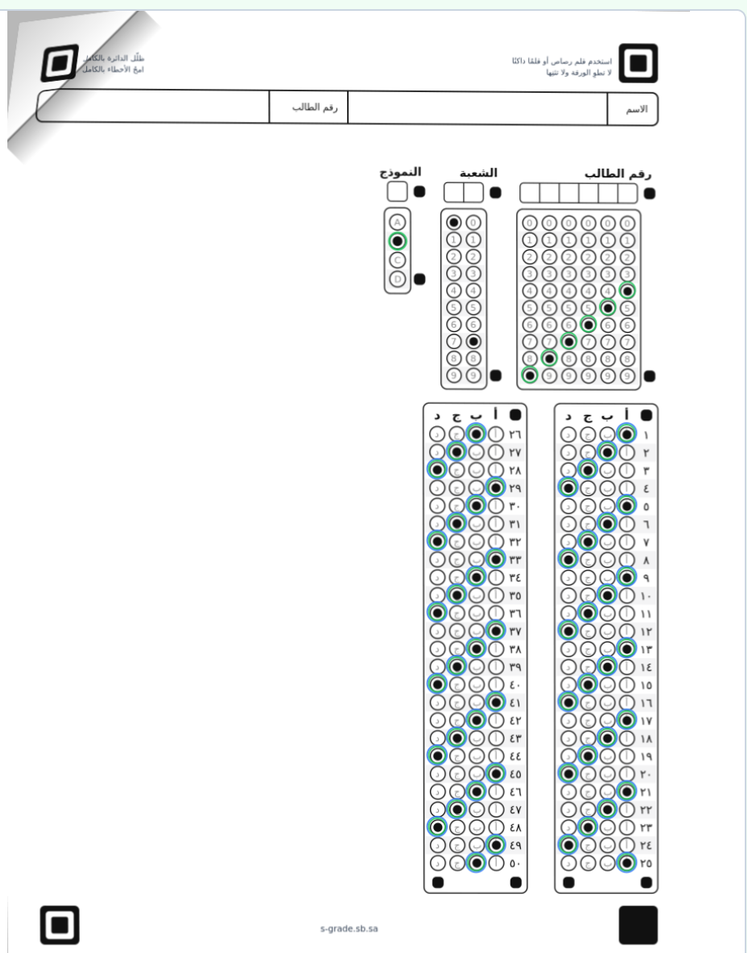
profile: `bent_corner_tl` · 574 passed · 0 failed



INPUT



WARPED



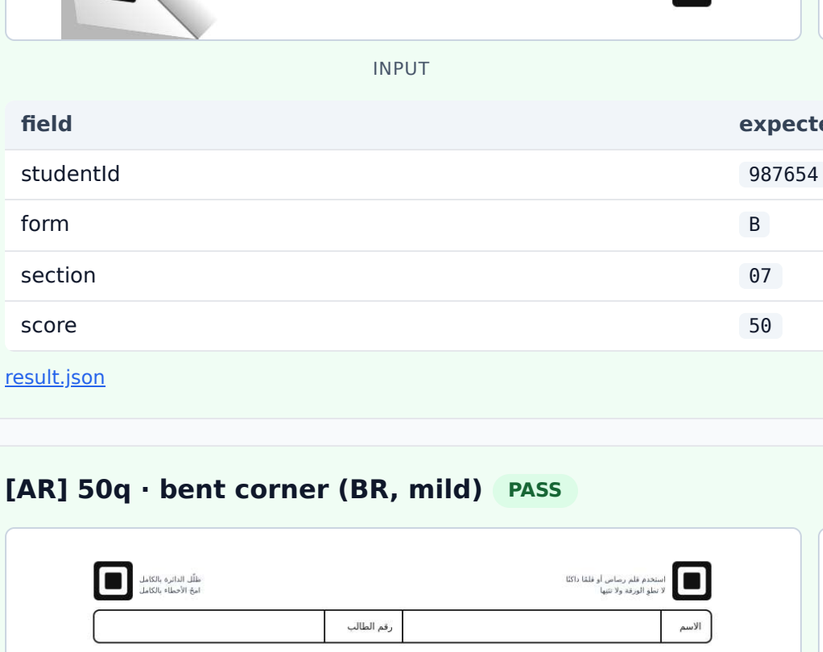
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

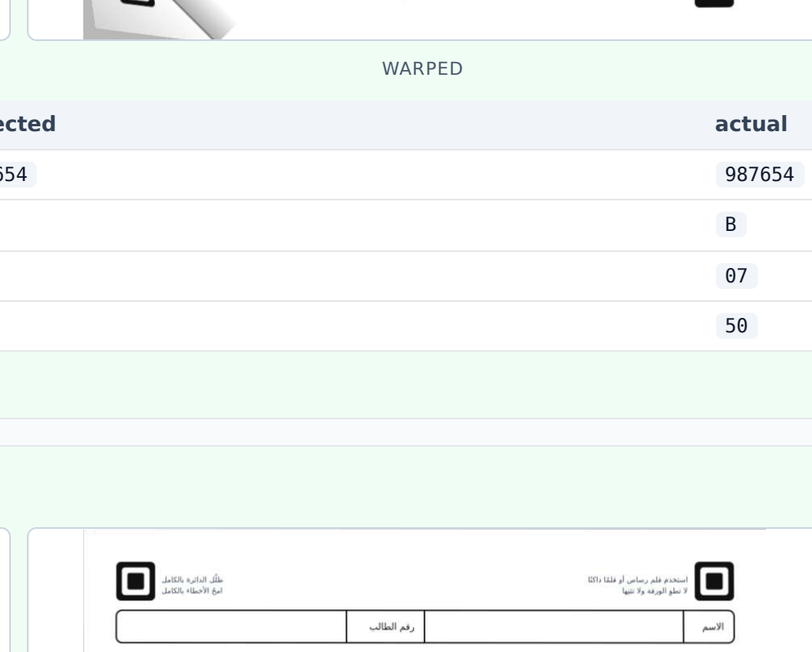
result.json

[AR] 50q · bent corner (BL, mild) PASS

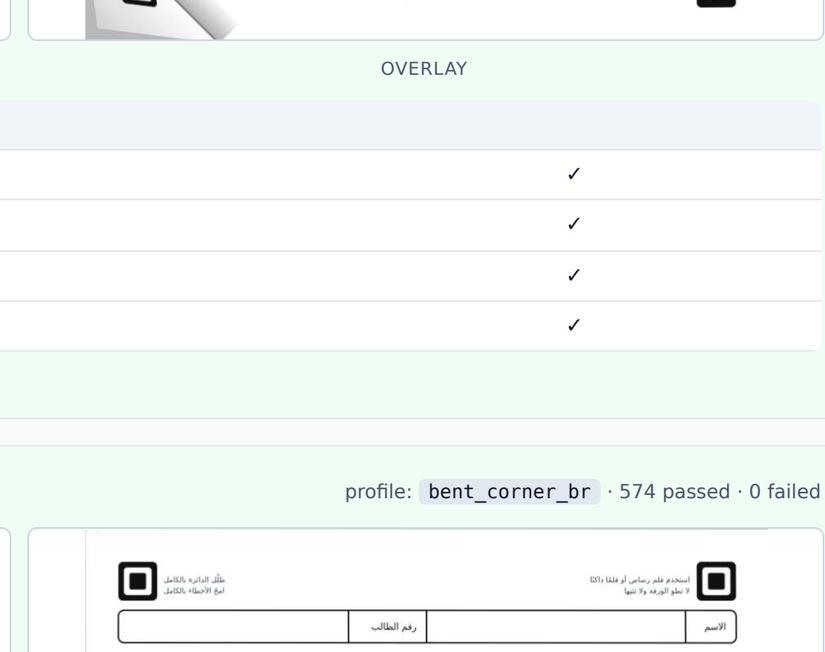
profile: `bent_corner_bl` · 574 passed · 0 failed



INPUT



WARPED



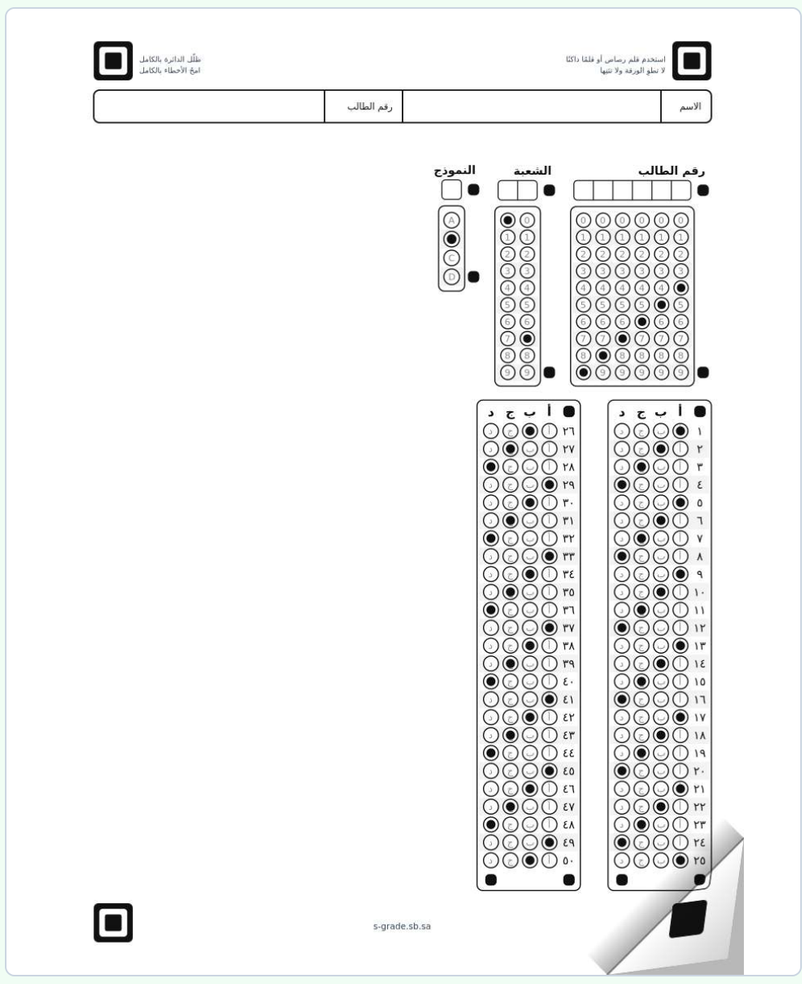
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

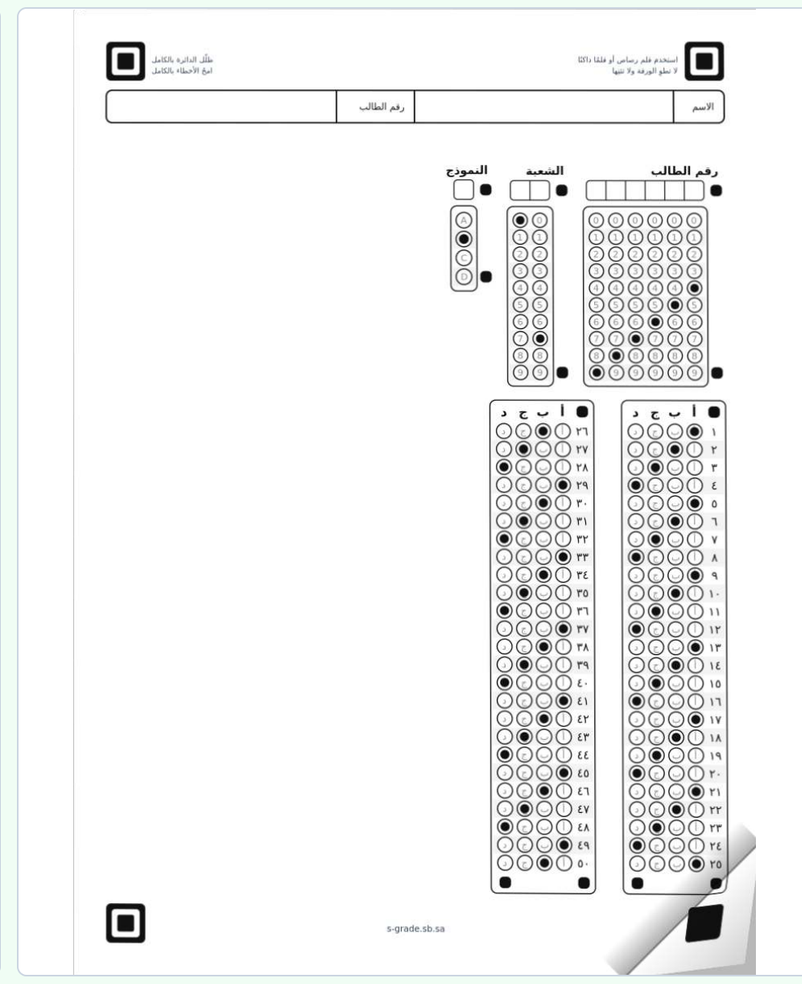
result.json

[AR] 50q · bent corner (BR, mild) PASS

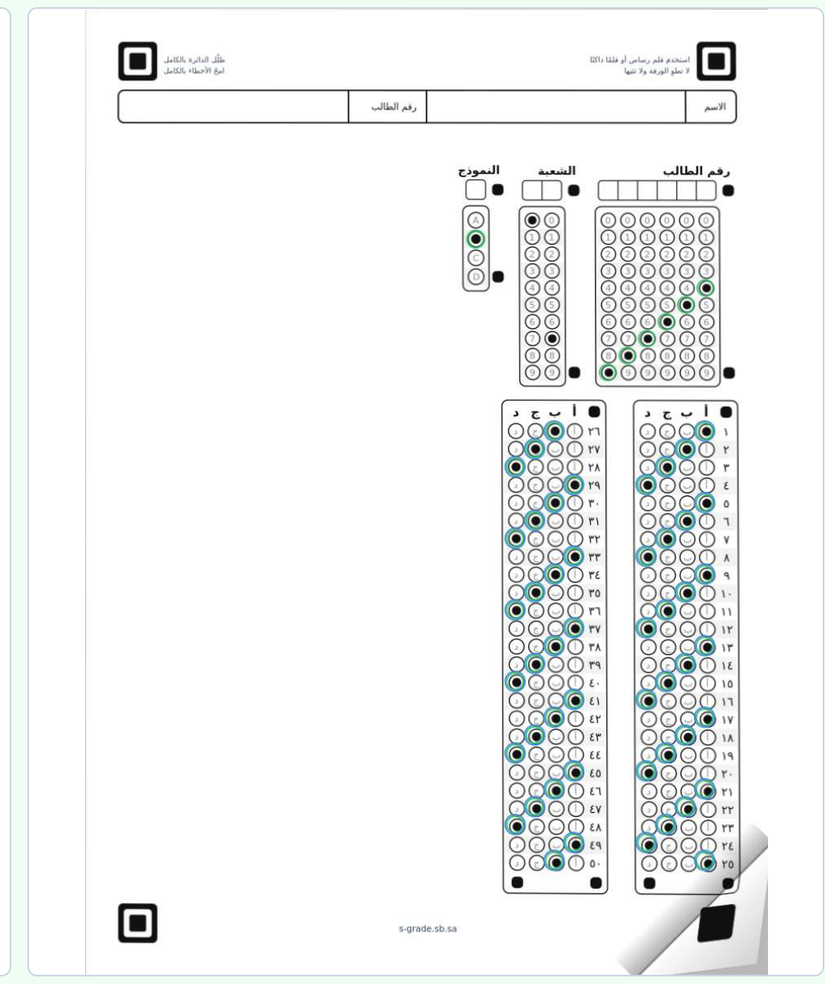
profile: `bent_corner_br` · 574 passed · 0 failed



INPUT



WARPED



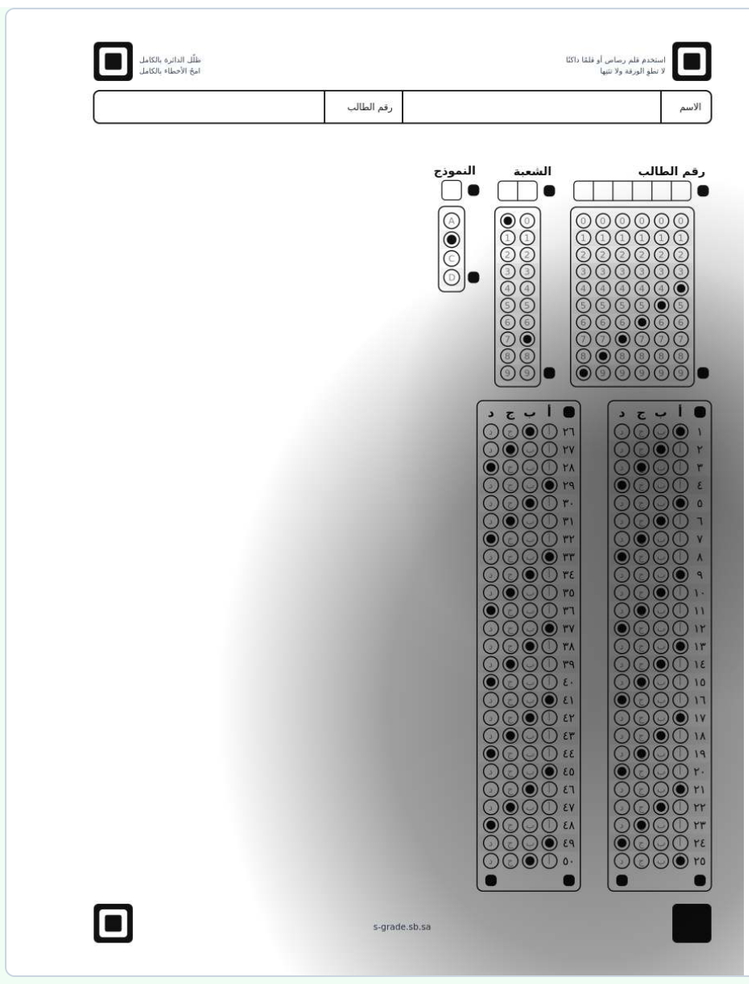
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

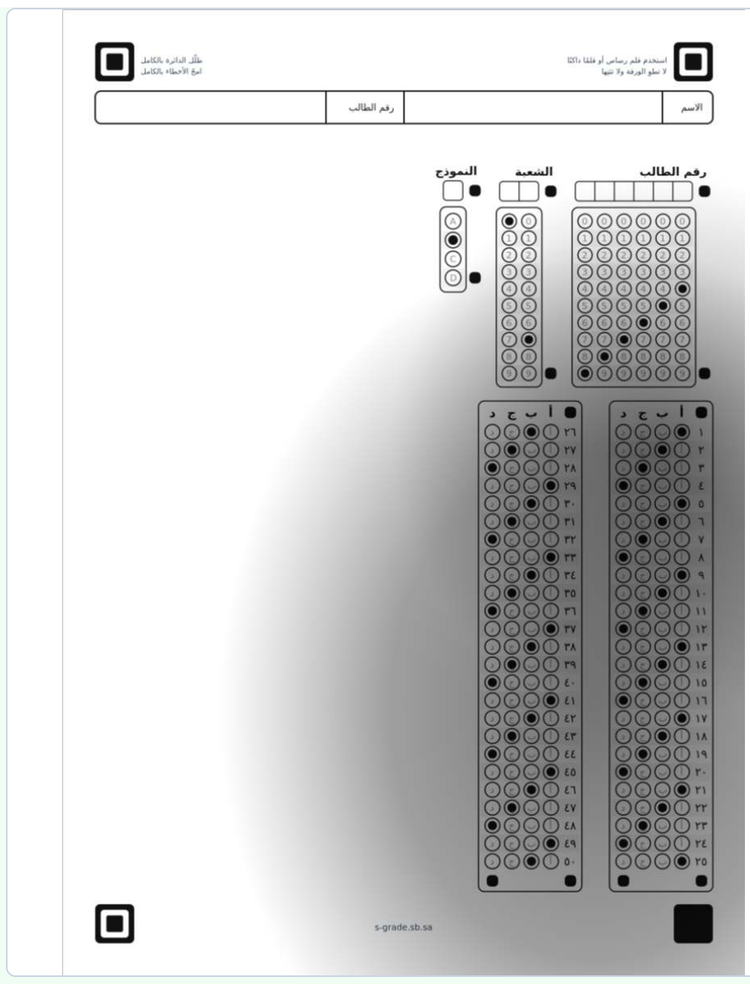
result.json

[AR] 50q · hand / arm shadow draped over sheet PASS

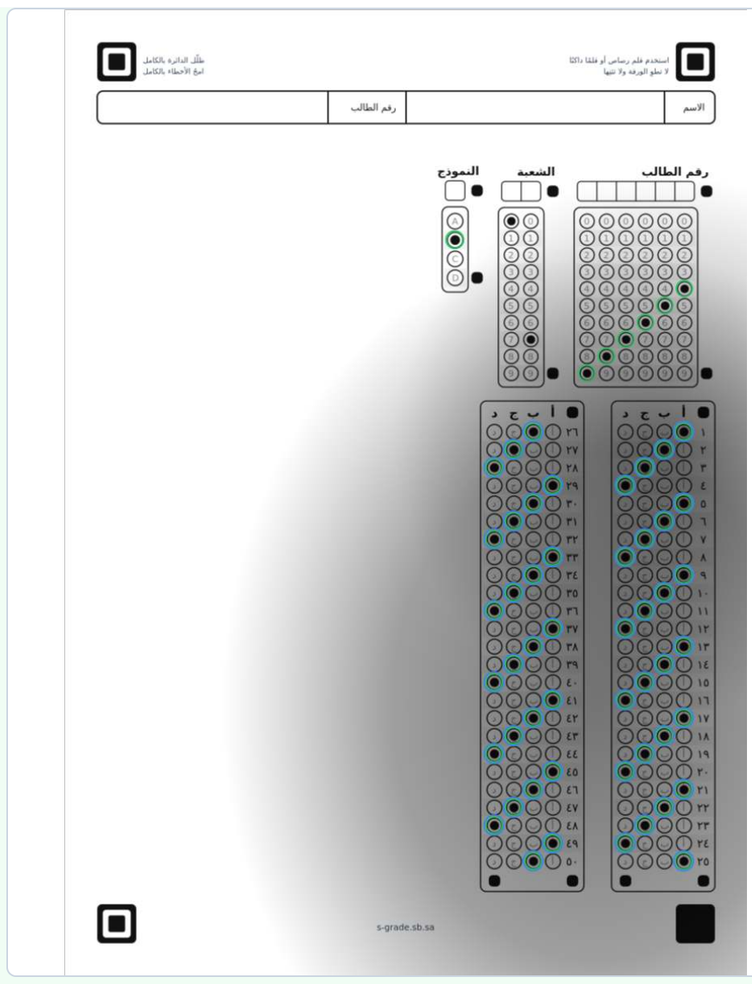
profile: `hand_shadow` · 574 passed · 0 failed



INPUT



WARPED



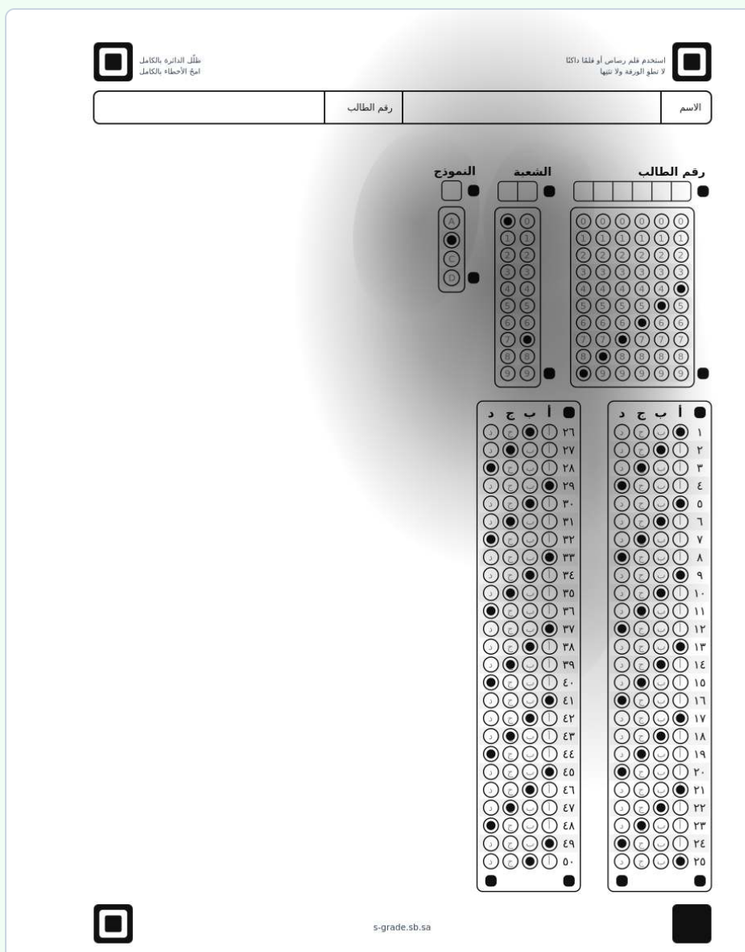
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

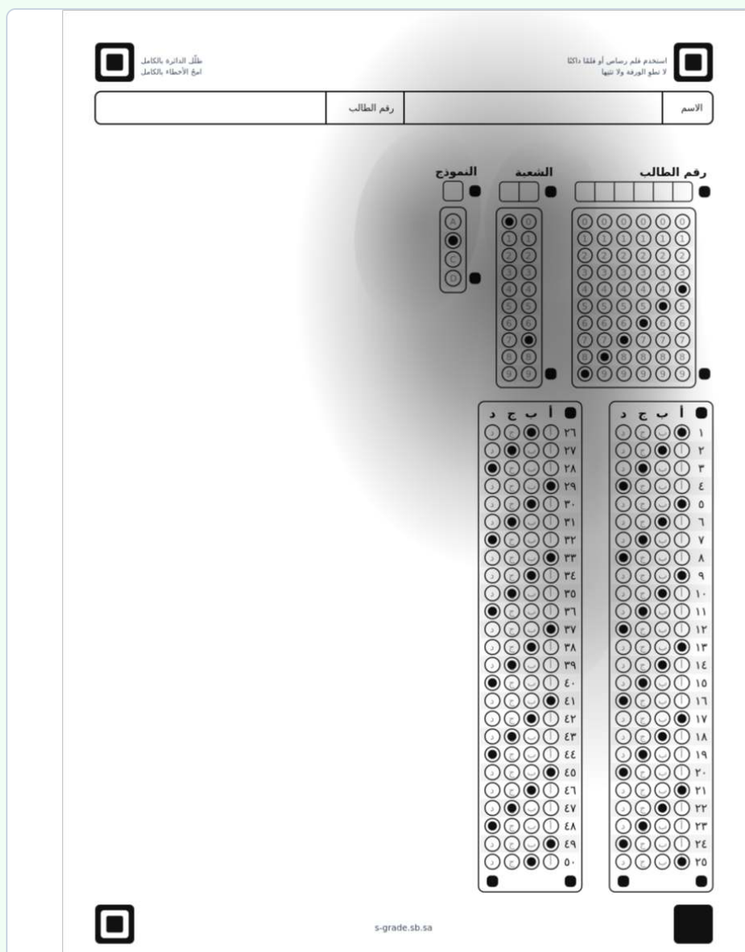
result.json

[AR] 50q · partial bubble-area shadow (filled rows stay clear) PASS

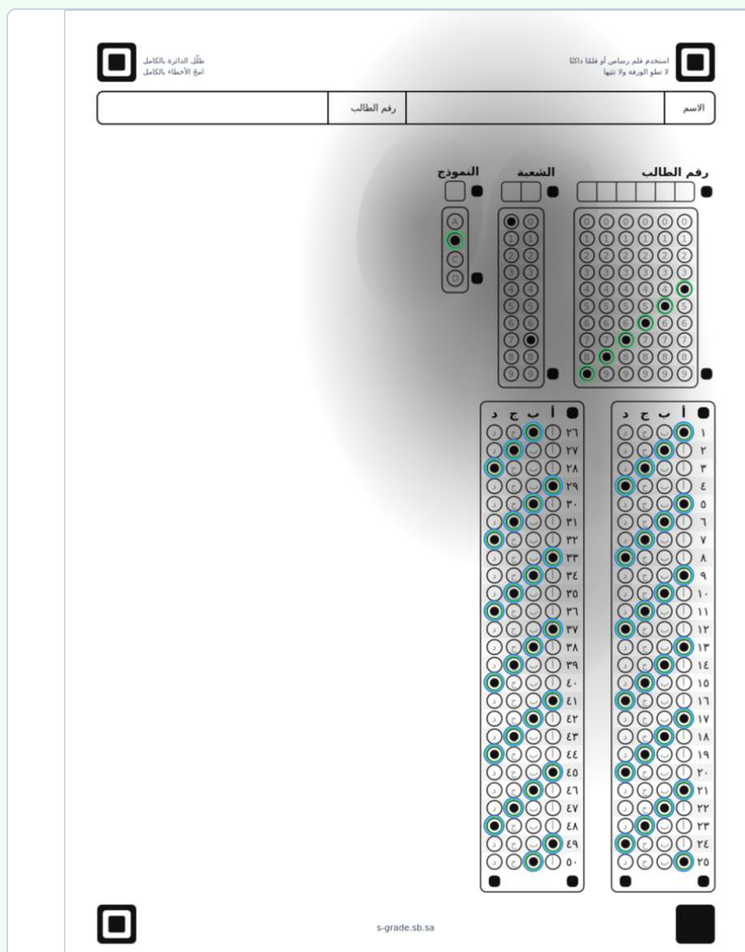
profile: `partial_bubble_shadow` · 574 passed · 0 failed



INPUT



WARPED



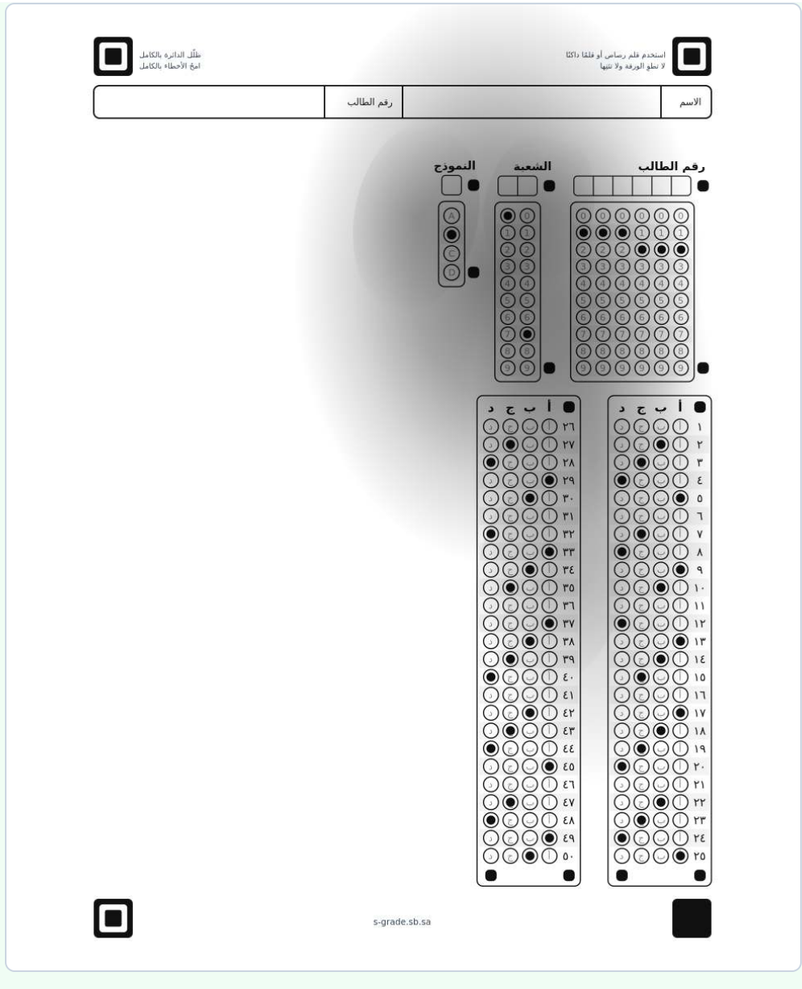
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

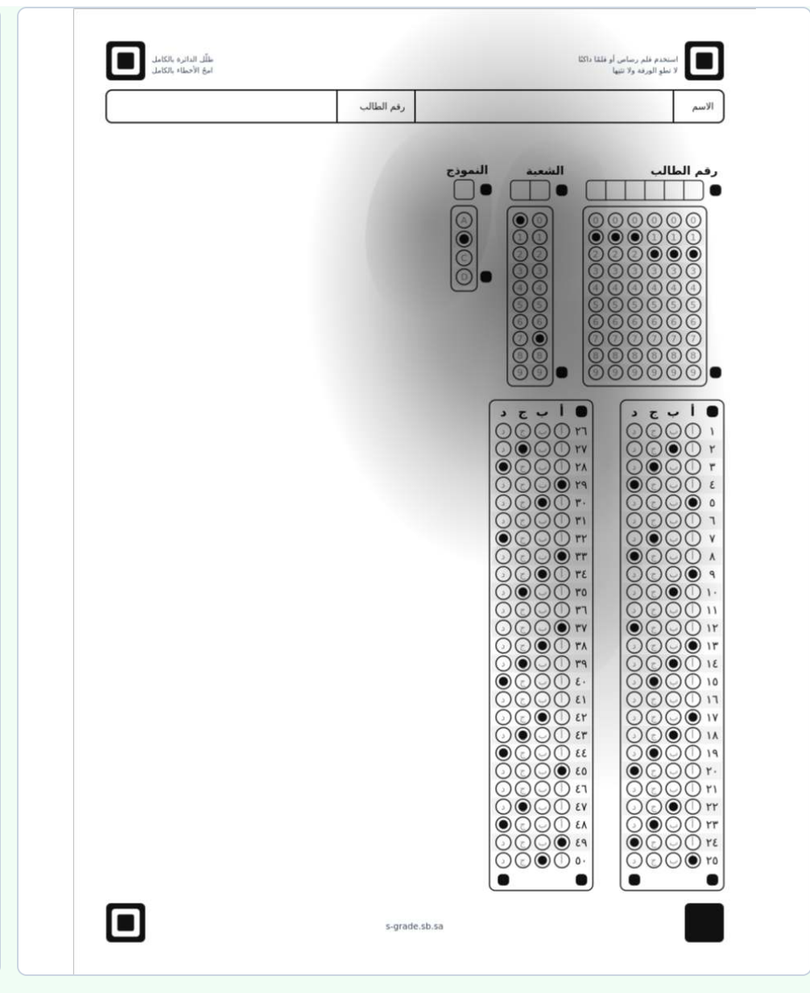
result.json

[AR] 50q · blank rows under partial bubble shadow stay blank PASS

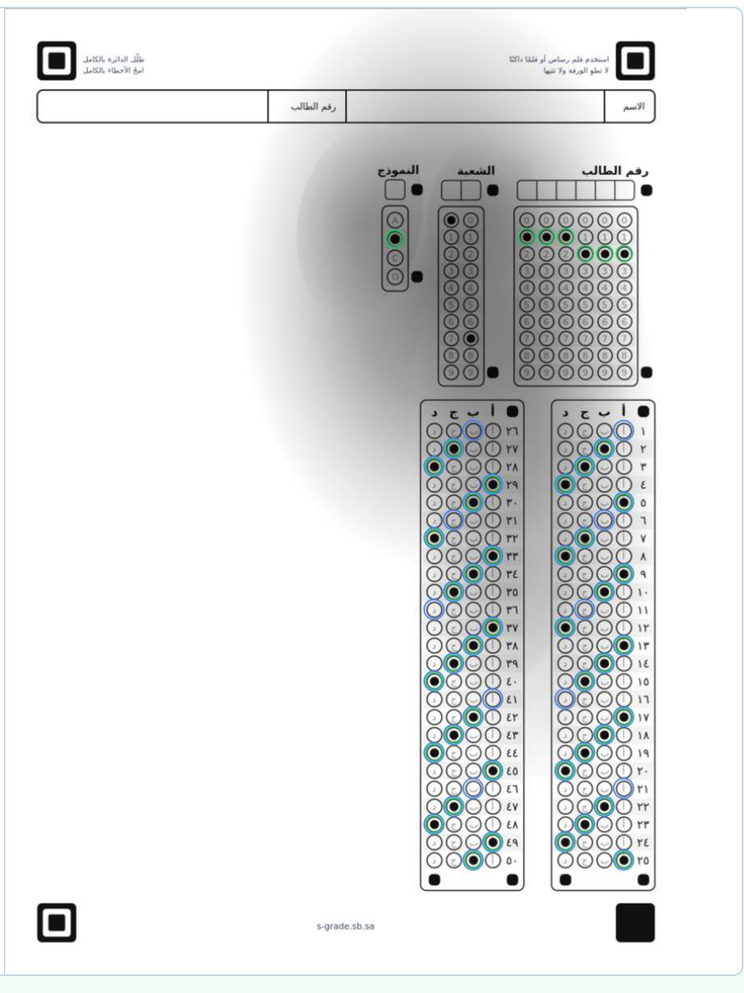
profile: `partial_bubble_shadow` · 574 passed · 0 failed



INPUT



WARPED



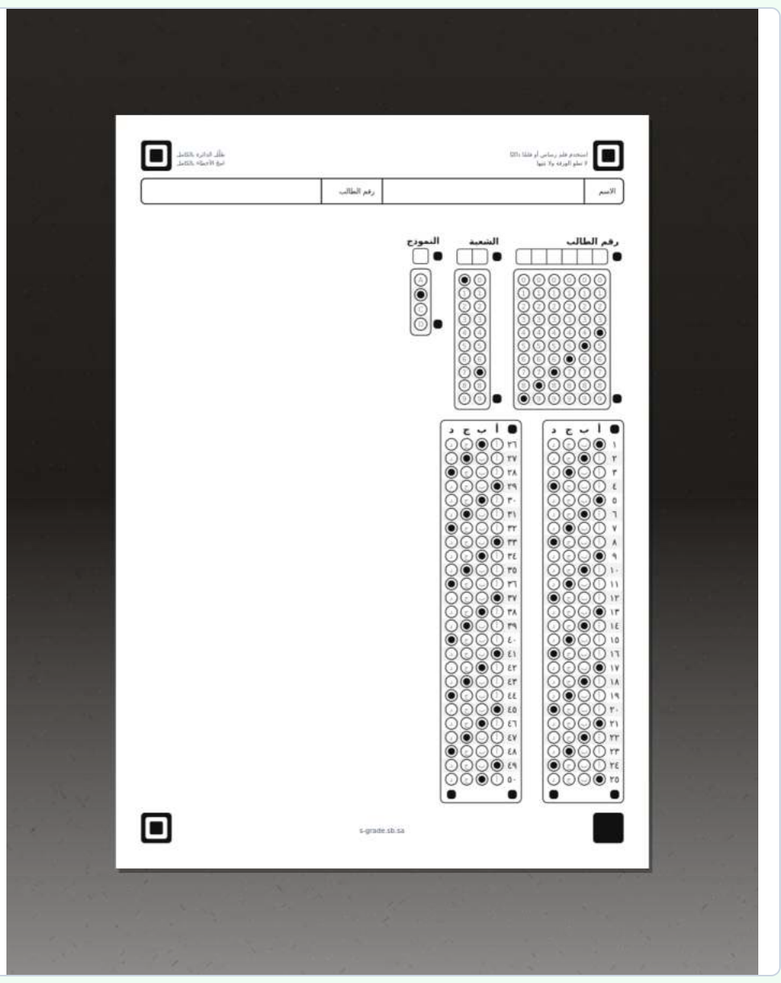
OVERLAY

field	expected	actual	
studentId	`111222`	`111222`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`40`	`40`	✓

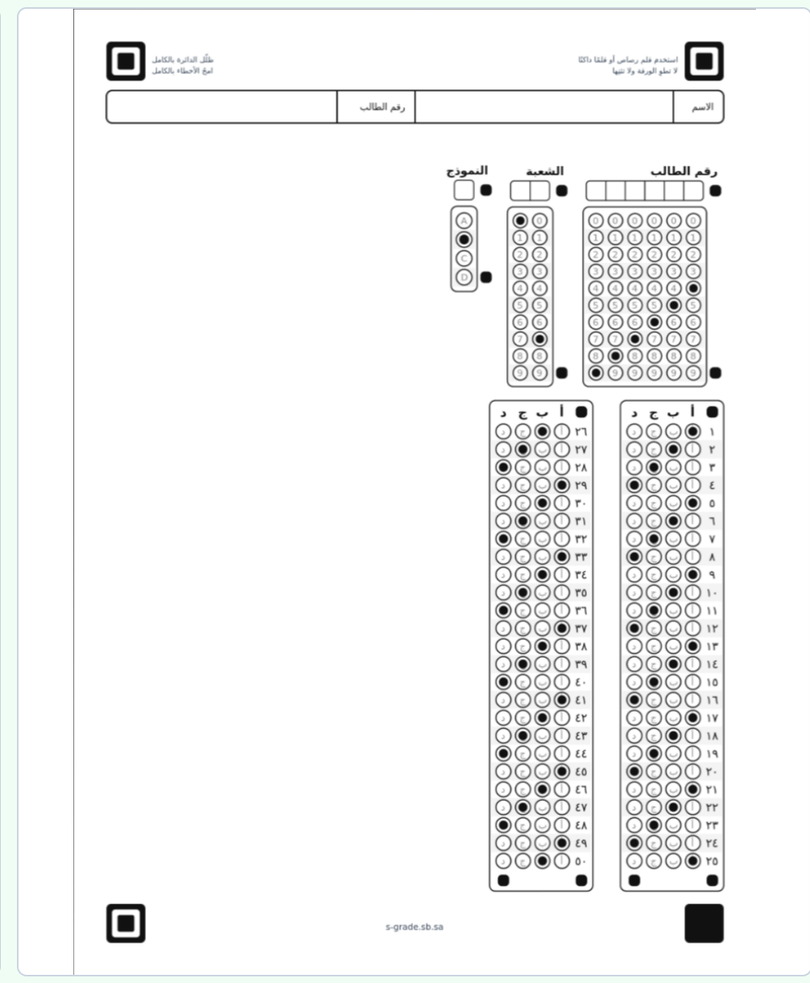
result.json

[AR] 50q · sheet on dark fabric couch PASS

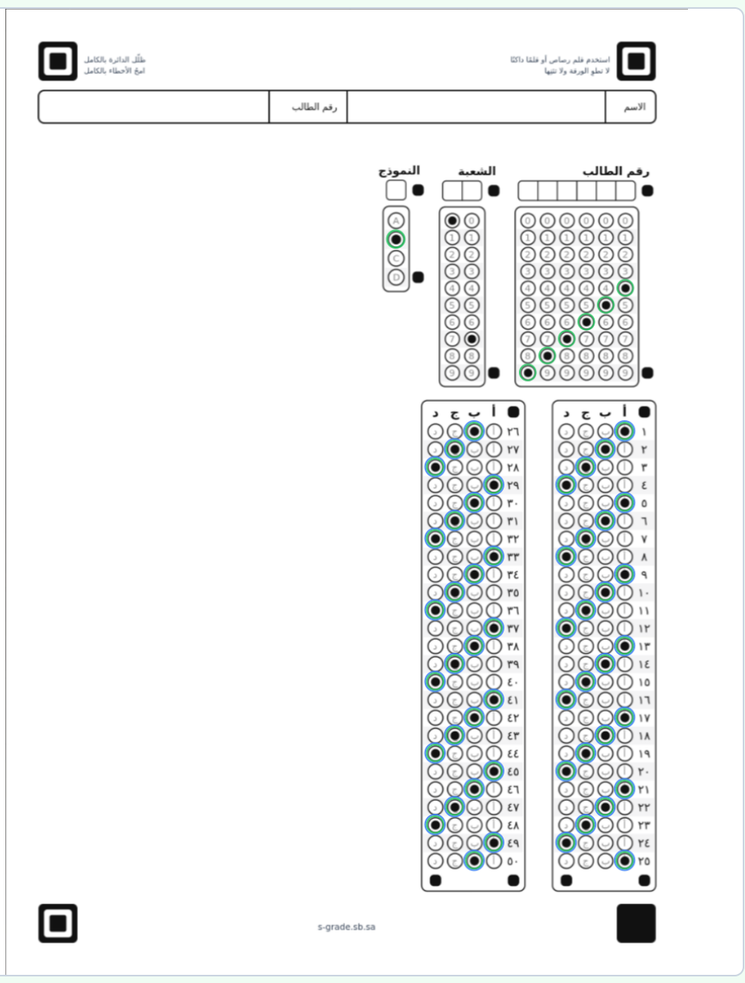
profile: `scene_fabric_couch` · 574 passed · 0 failed



INPUT



WARPED



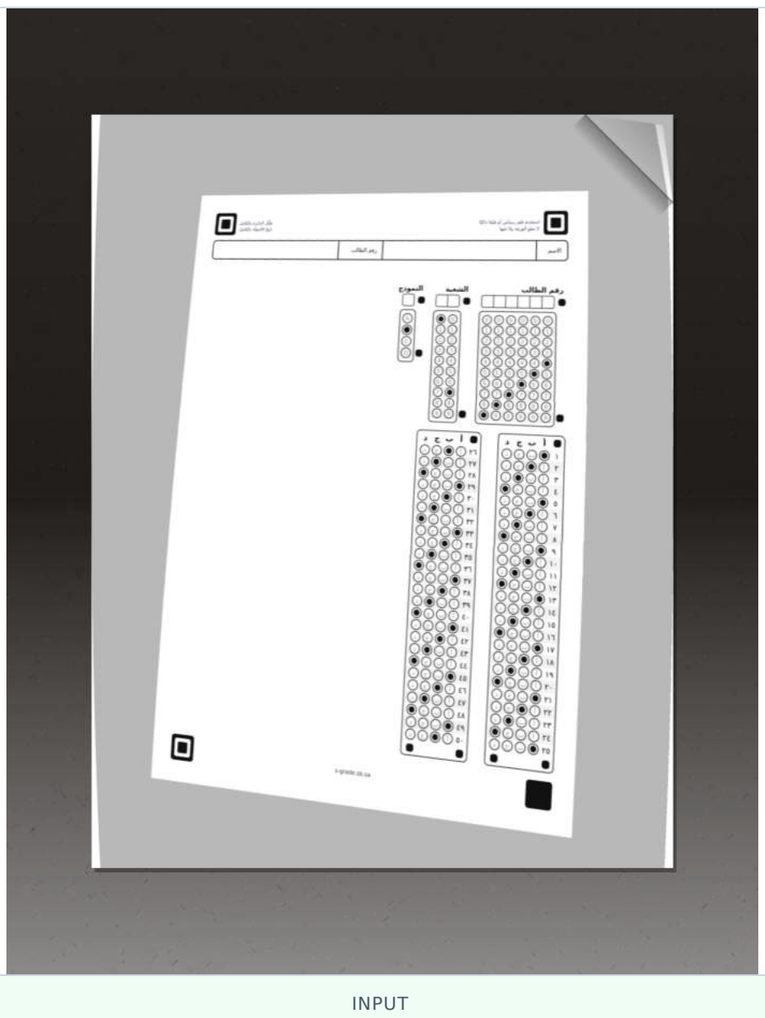
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

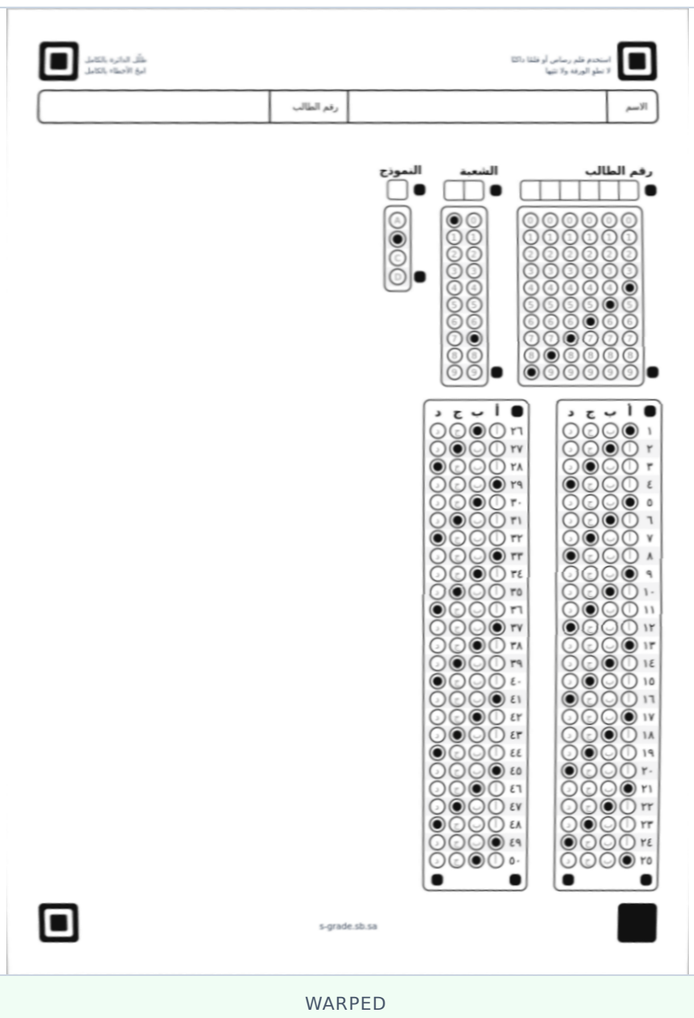
result.json

[AR] 50q · real photo mimic 1: fabric couch + mild tilt + bent TR PASS

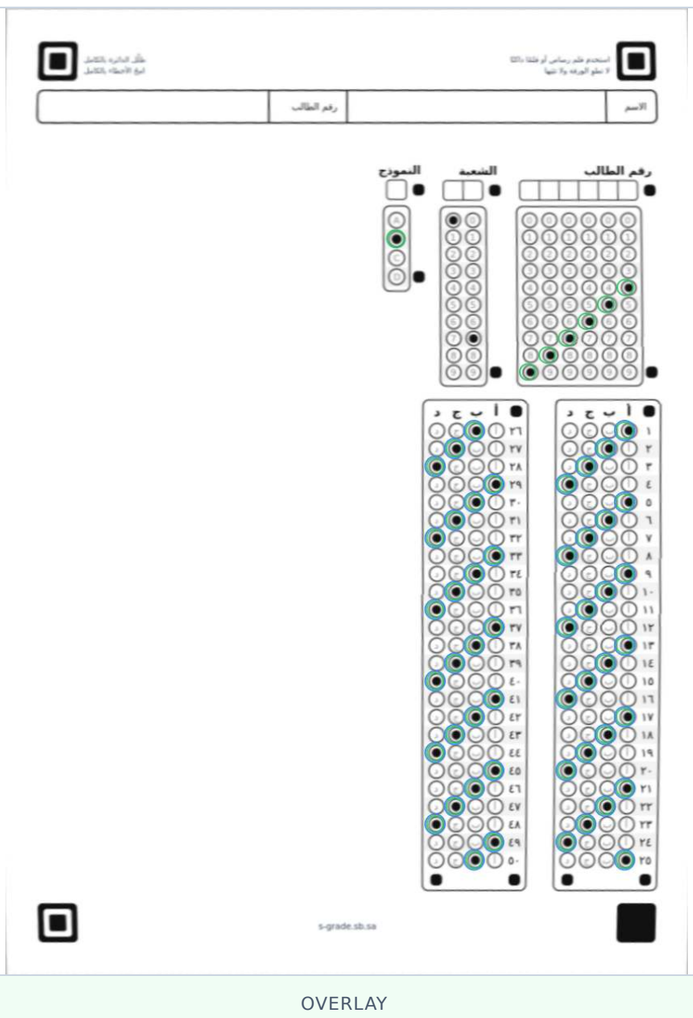
profile: `perspective_mild → rotated_3deg → curled_page_mild → bent_corner_tr → scene_fabric_couch` · 574 passed · 0 failed



INPUT



WARPED



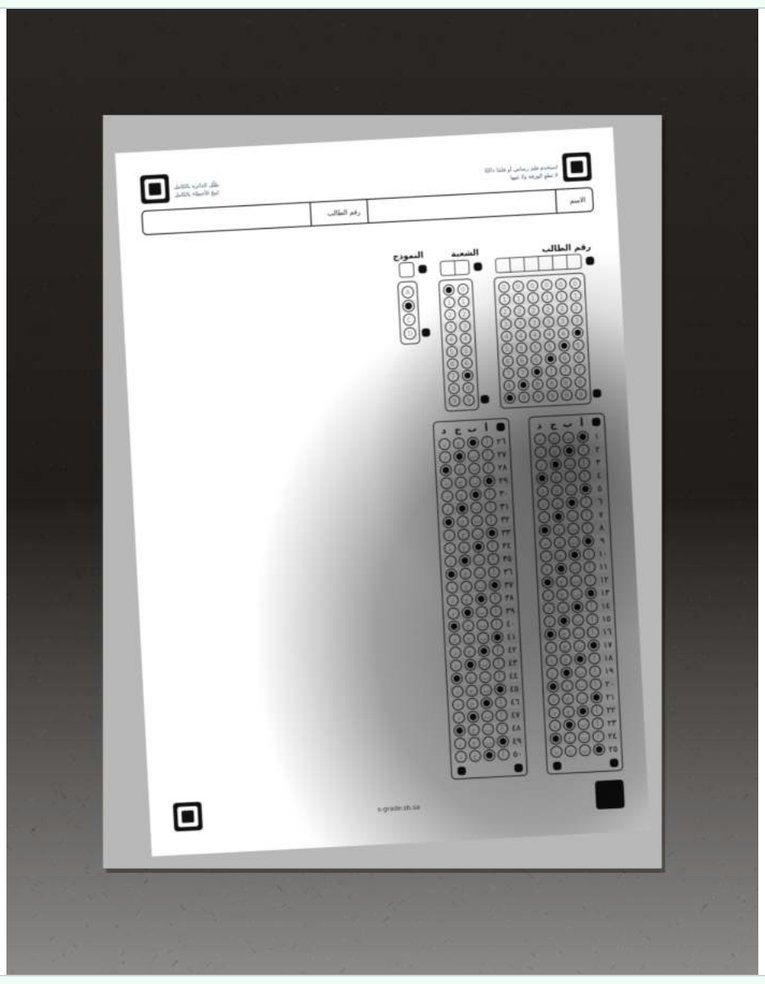
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

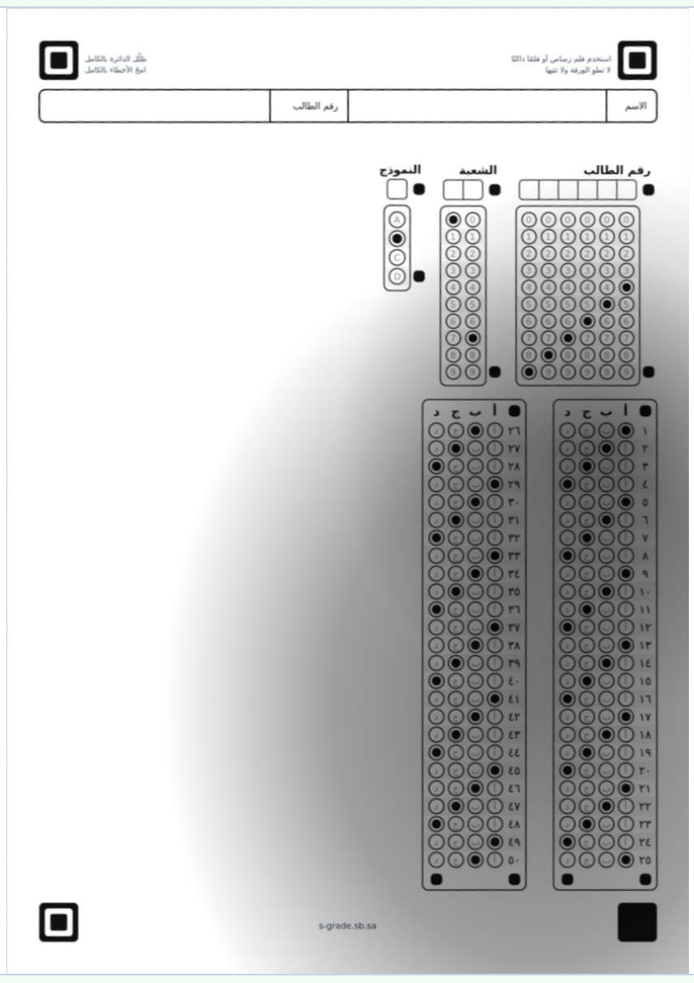
result.json

[AR] 50q · real photo mimic 2: fabric couch + hand shadow PASS

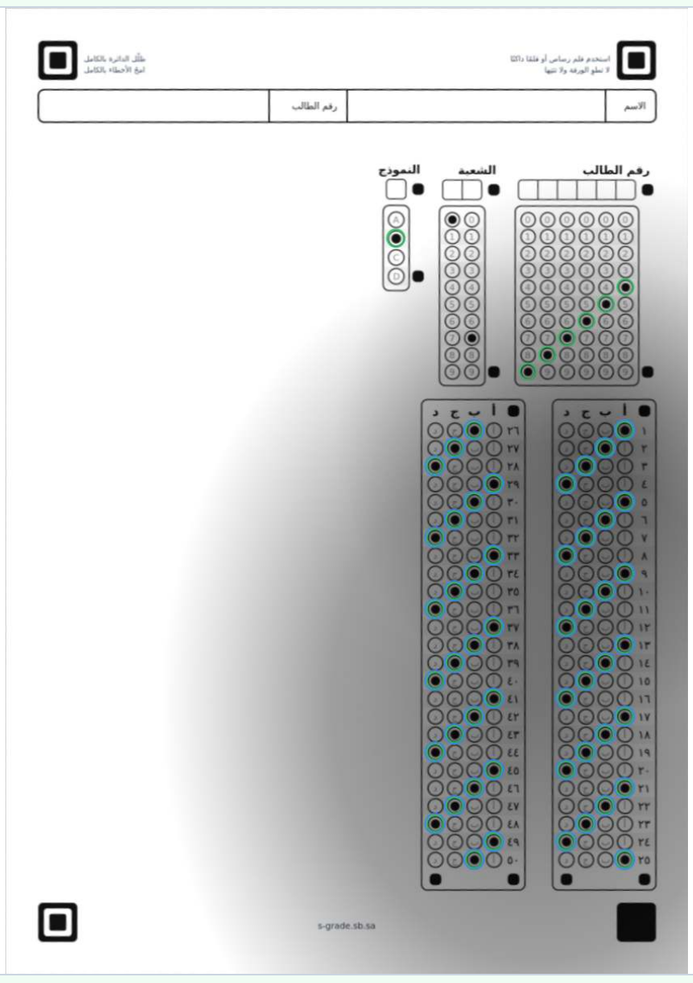
profile: `hand_shadow → rotated_neg3deg → scene_fabric_couch` · 574 passed · 0 failed



INPUT



WARPED



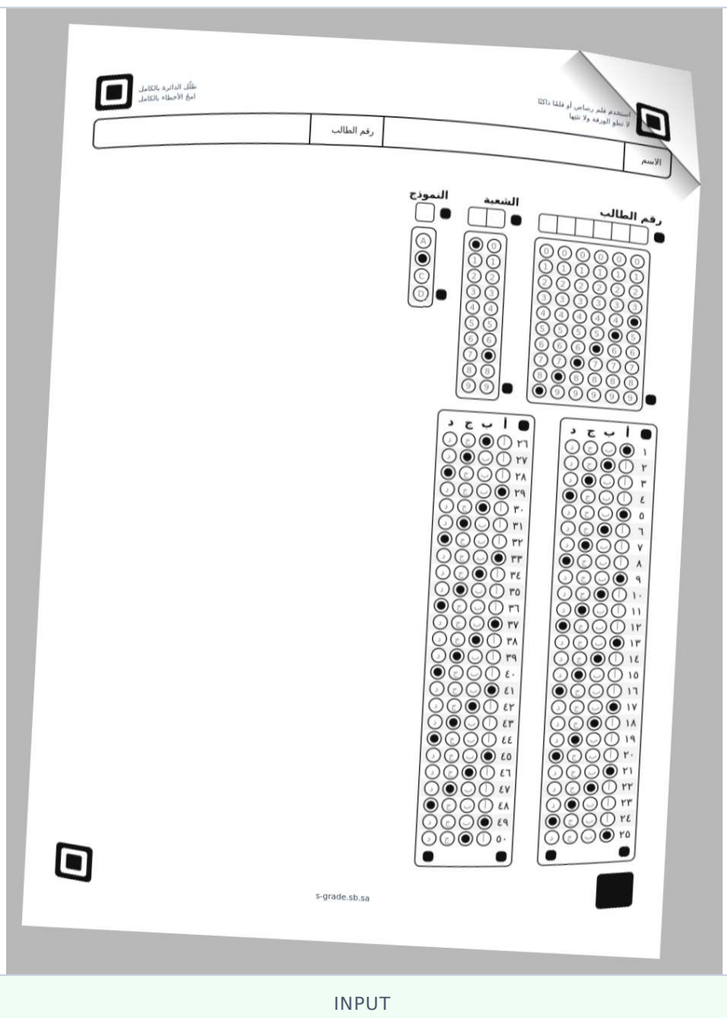
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

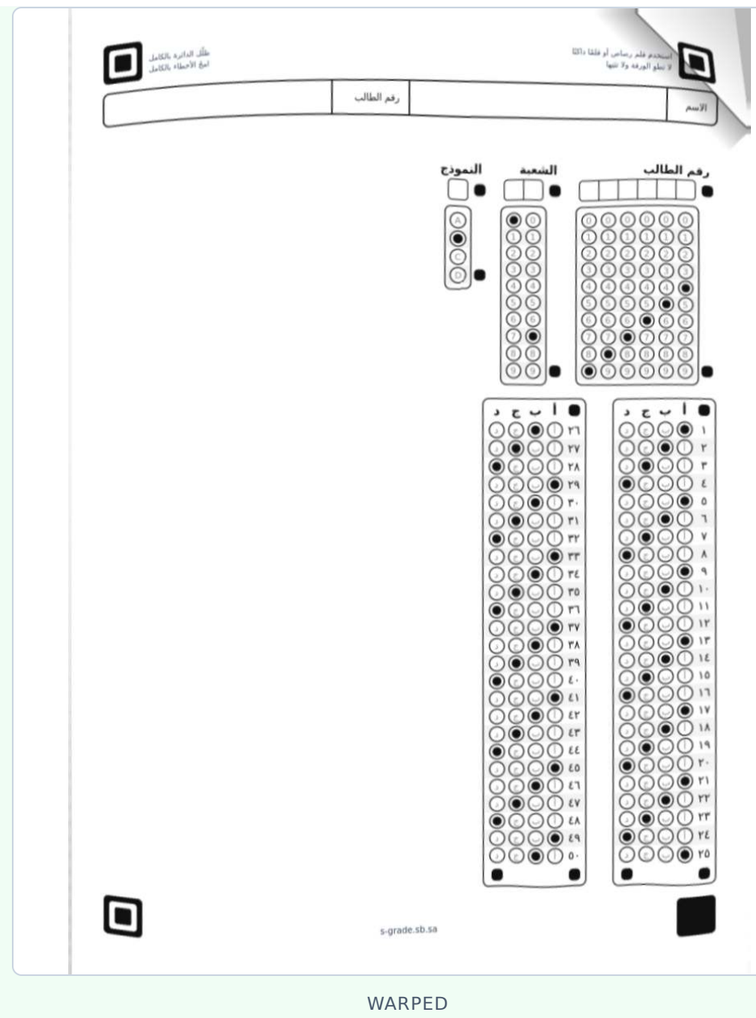
result.json

[AR] 50q · stacked curl horizontal + bent TR + rotation PASS

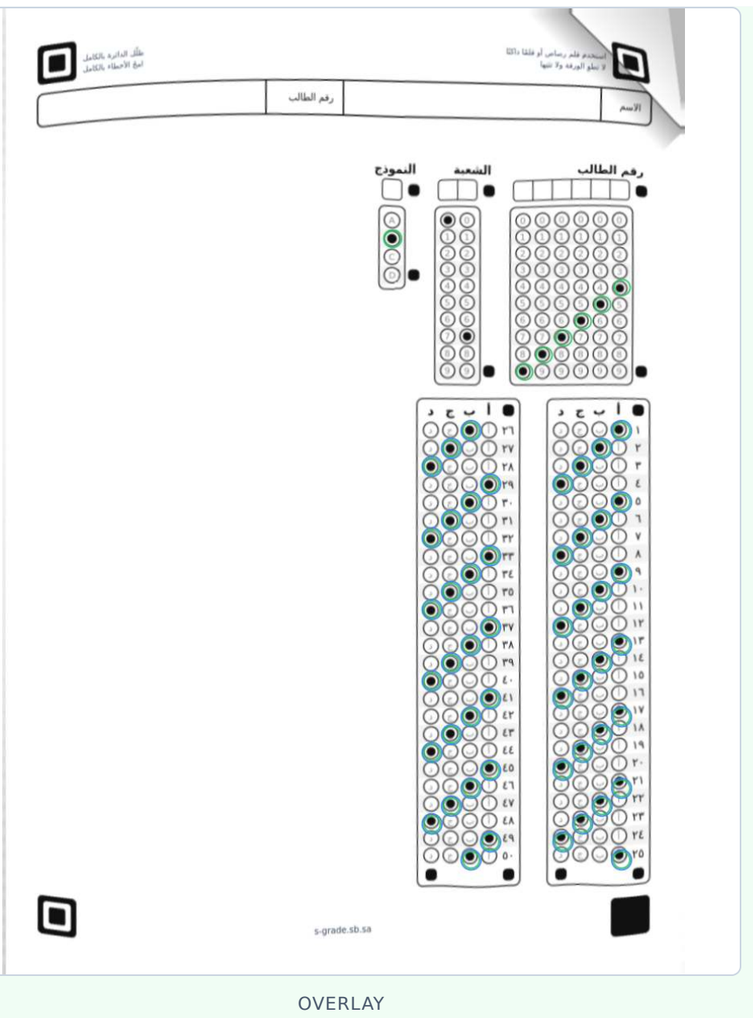
profile: `curled_page_horizontal → bent_corner_tr → rotated_3deg` · 574 passed · 0 failed



INPUT



WARPED



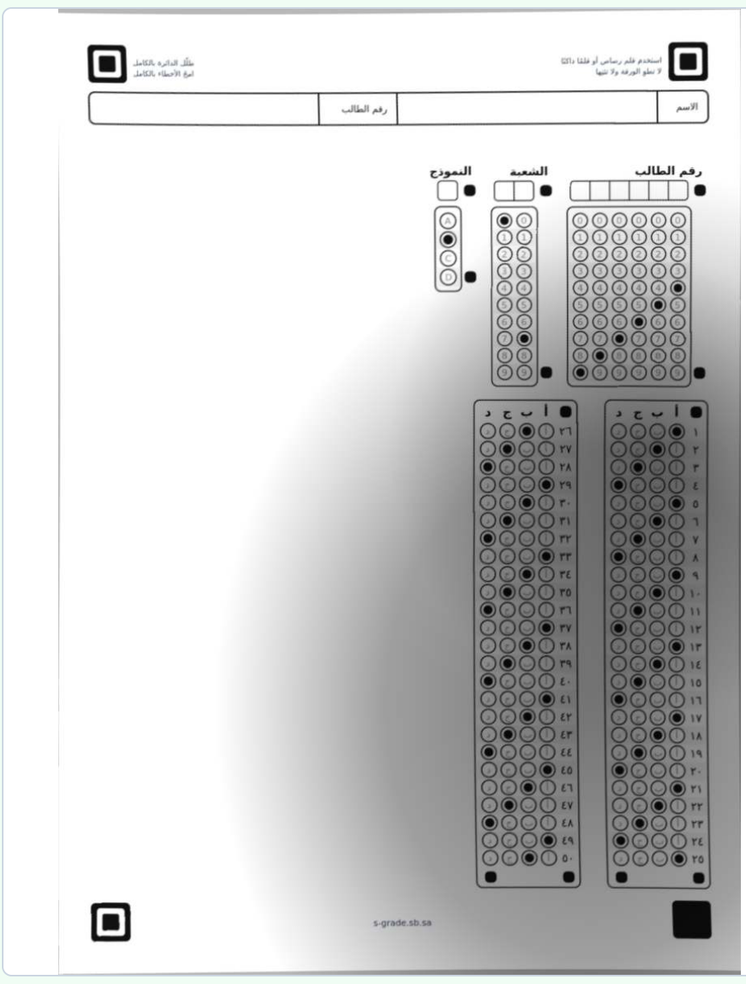
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

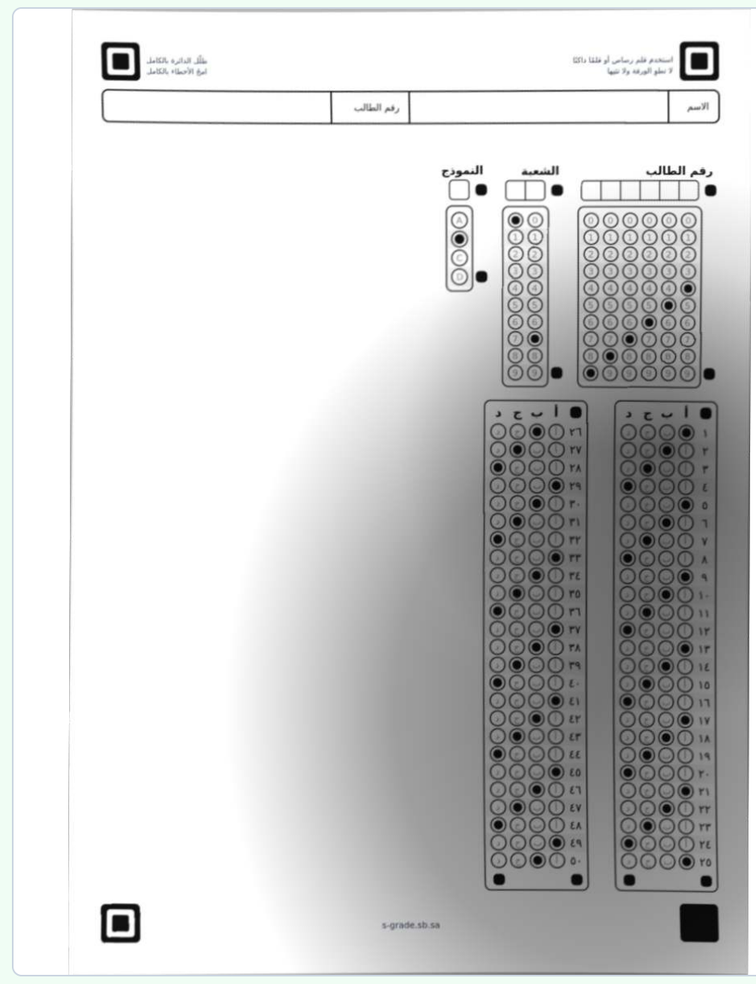
result.json

[AR] 50q · stacked curl diagonal + hand shadow PASS

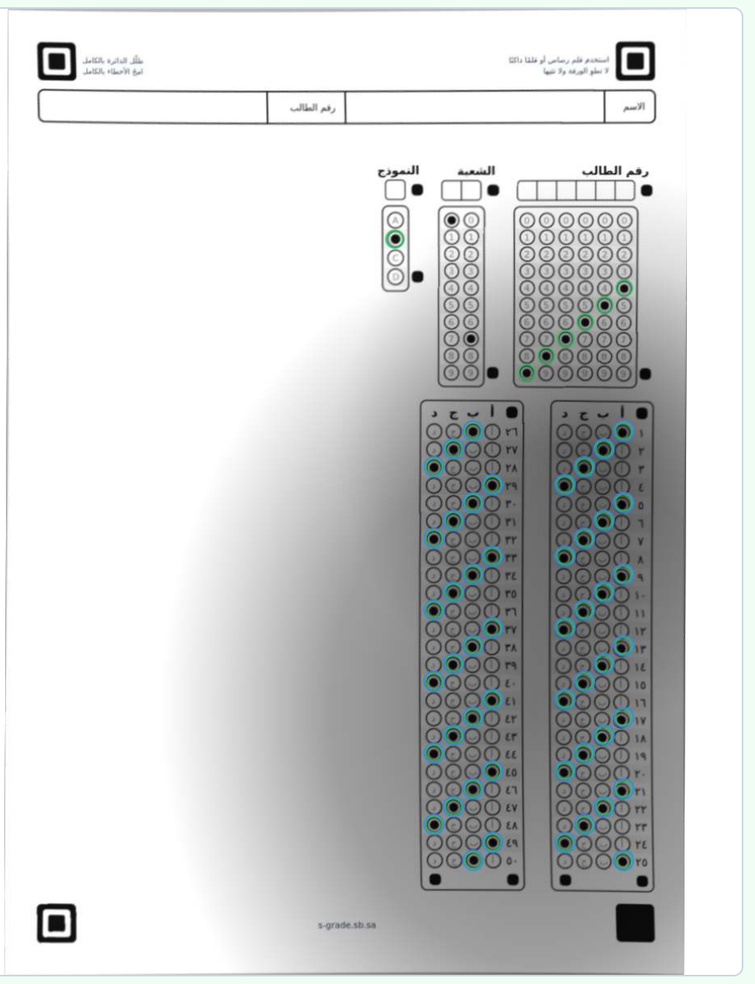
profile: `curled_page_diagonal → hand_shadow` · 574 passed · 0 failed



INPUT



WARPED



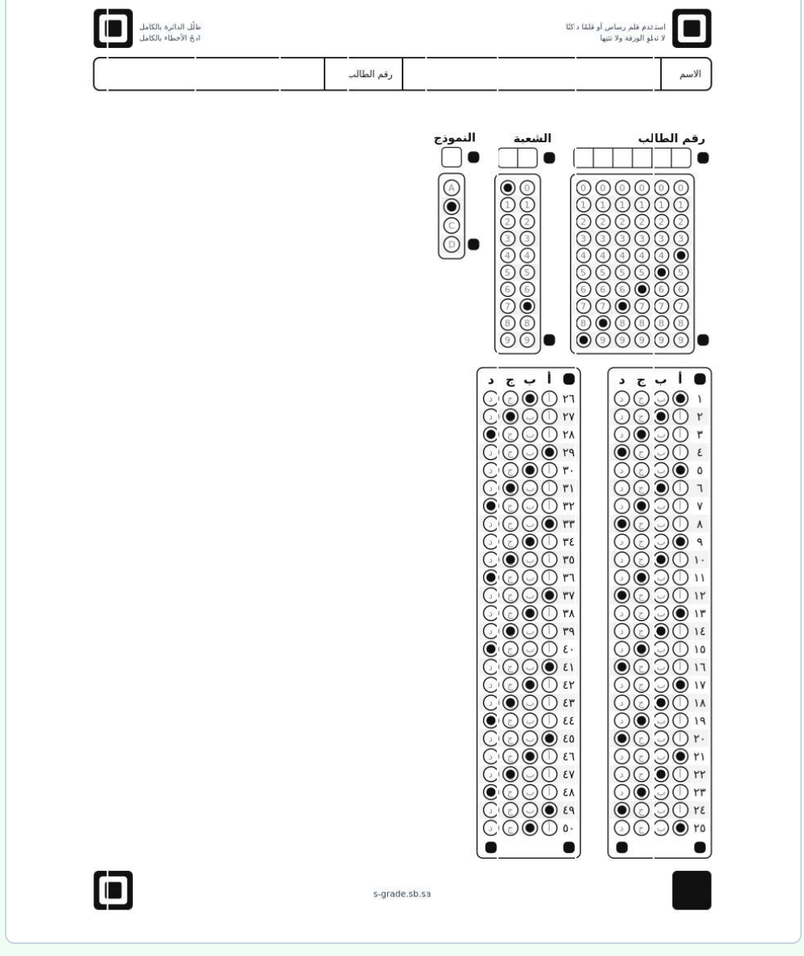
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

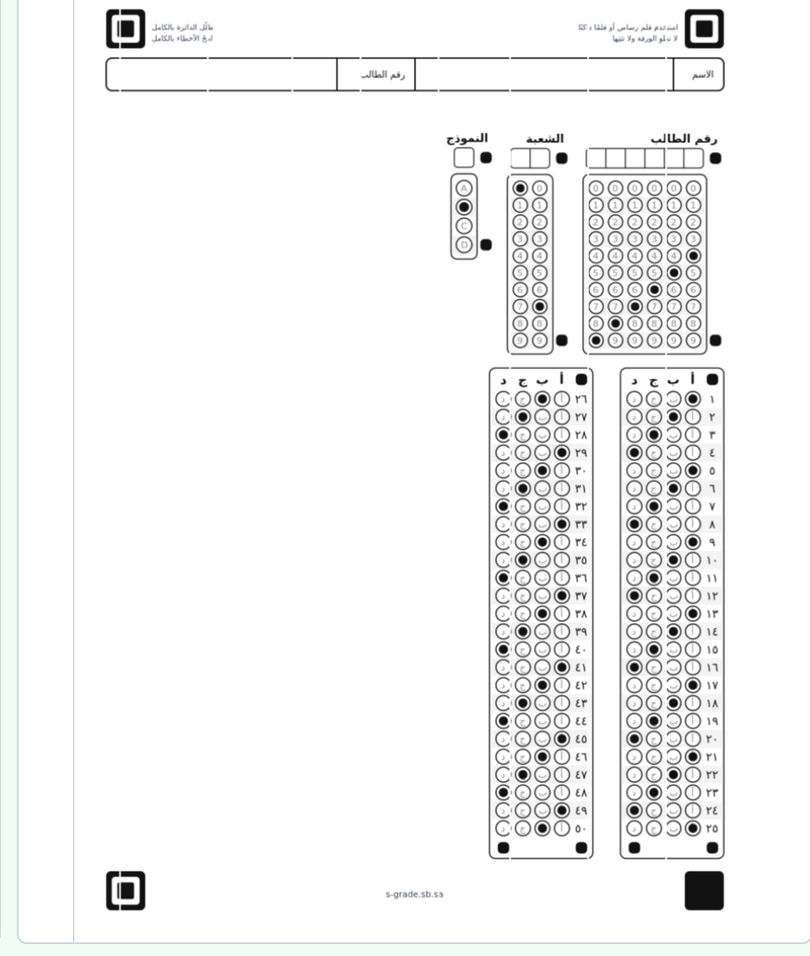
result.json

[AR] 50q · drum-stripe ghosting print PASS

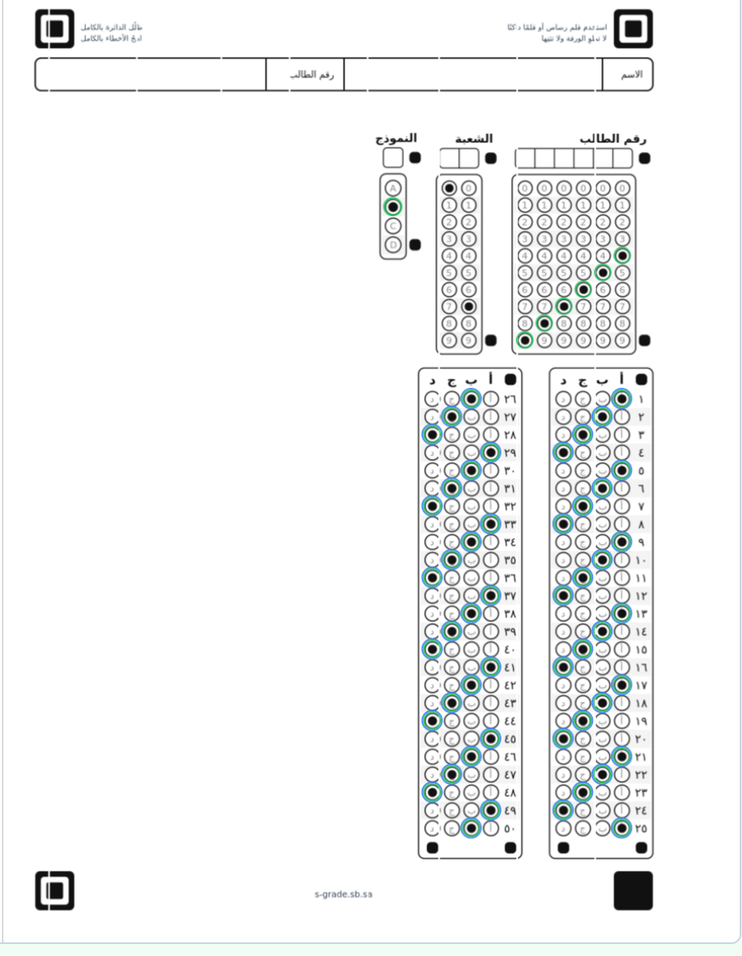
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



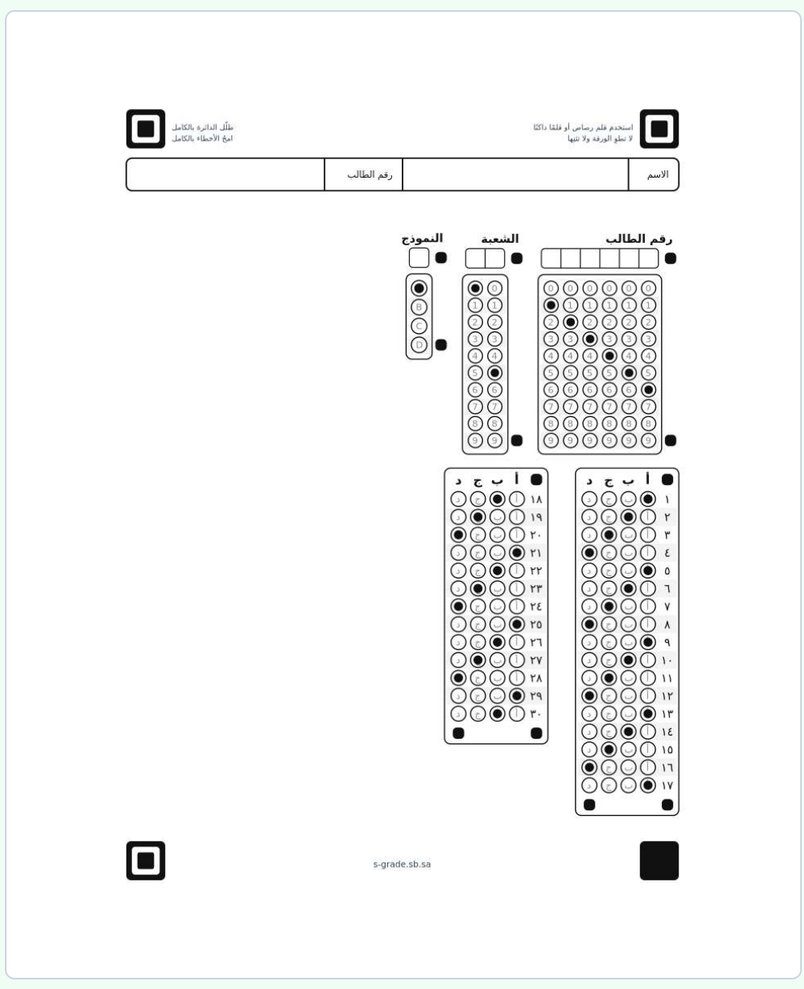
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

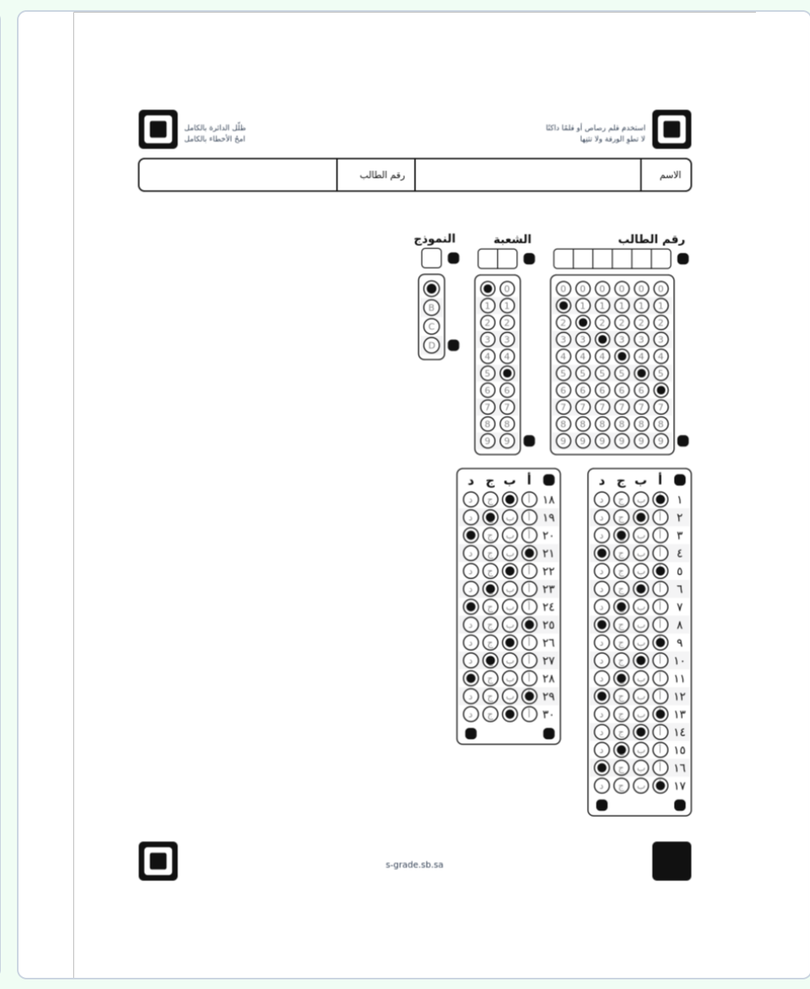
result.json

[AR] 30q · wide margins (H=20,V=30) · pristine PASS

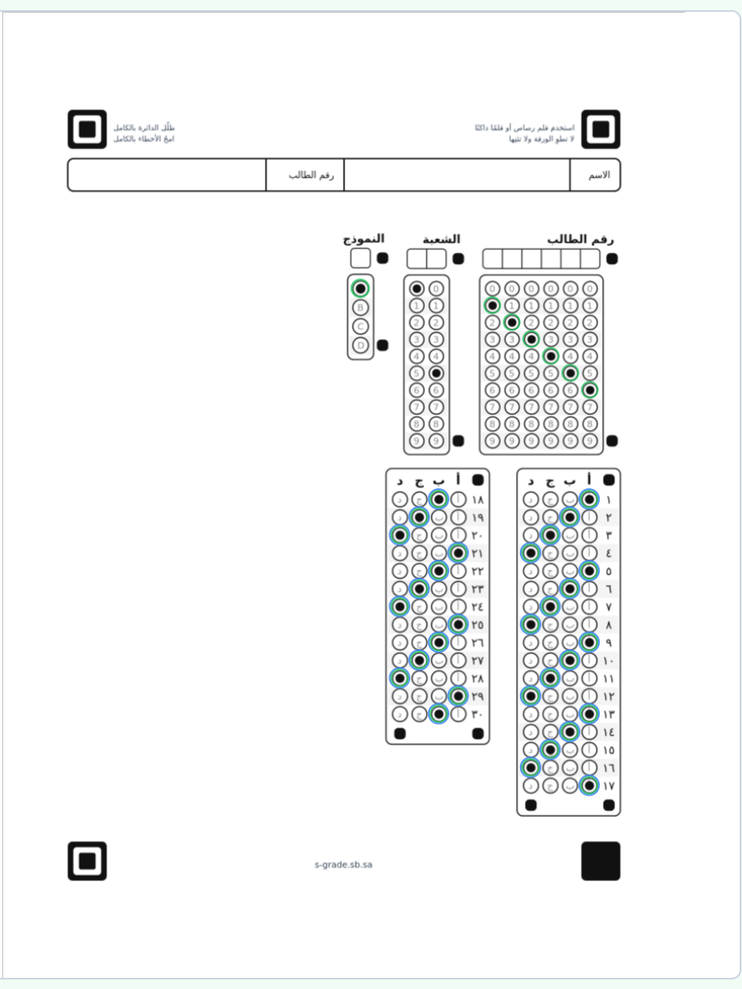
profile: `pristine` · 414 passed · 0 failed



INPUT



WARPED



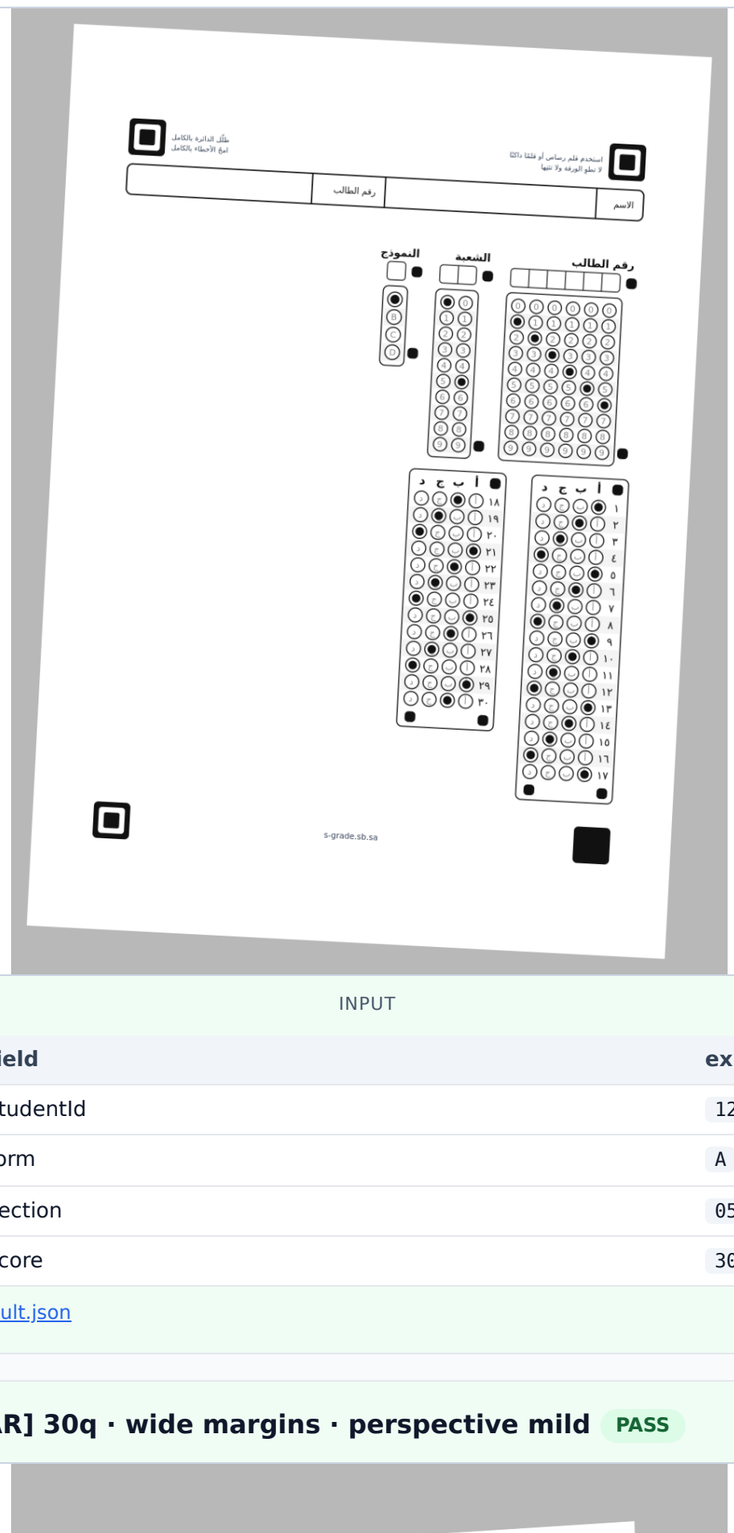
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

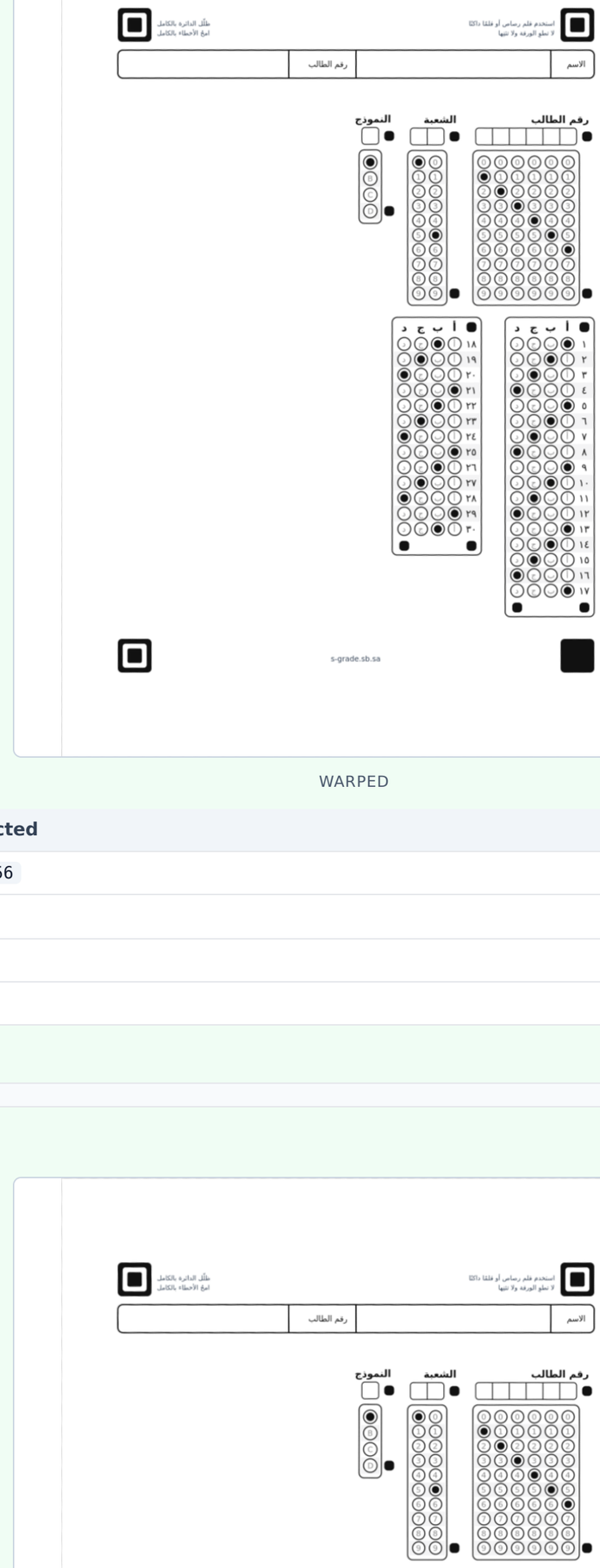
result.json

[AR] 30q · wide margins · rotation 3deg PASS

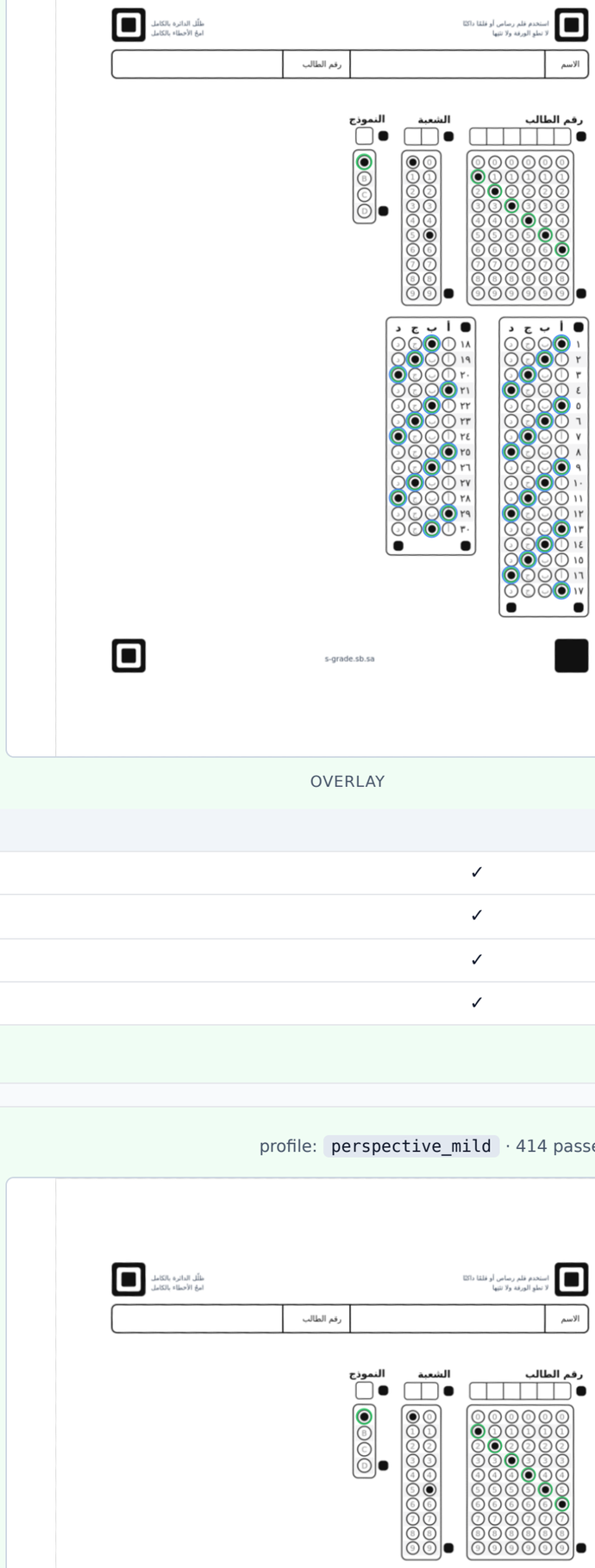
profile: `rotated_3deg` · 414 passed · 0 failed



INPUT



WARPED



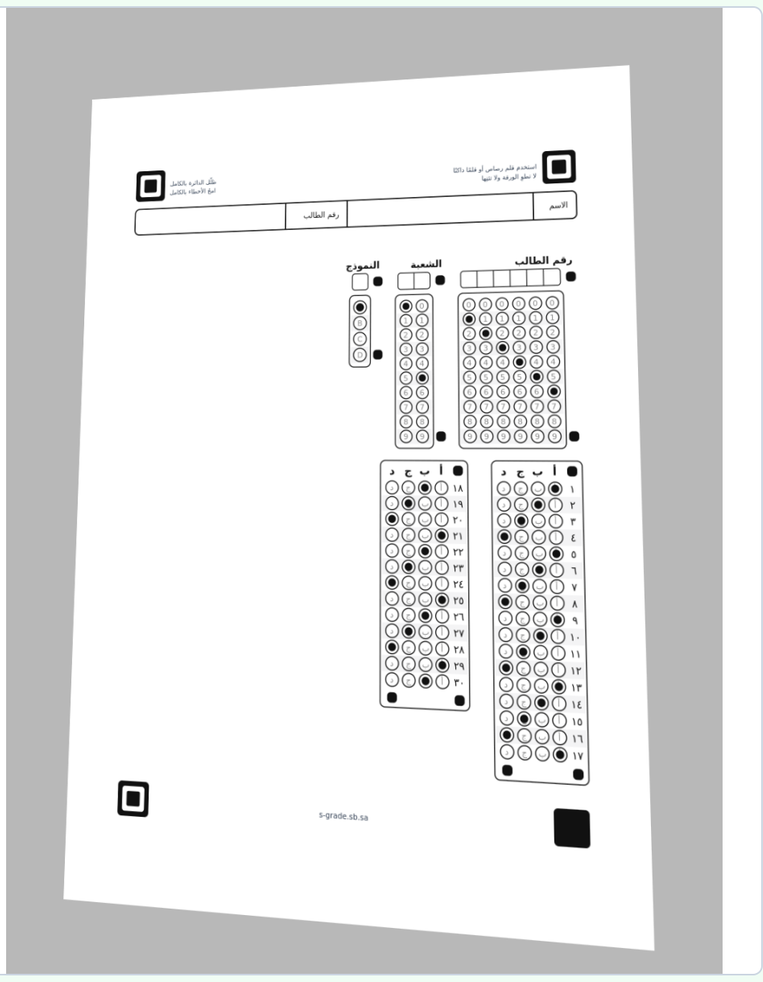
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

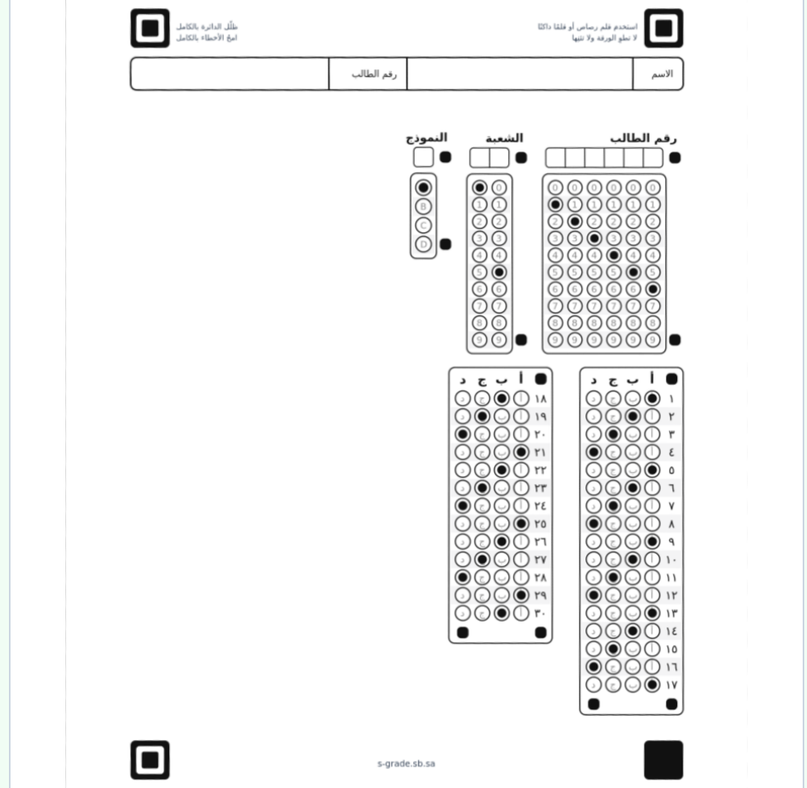
result.json

[AR] 30q · wide margins · perspective mild PASS

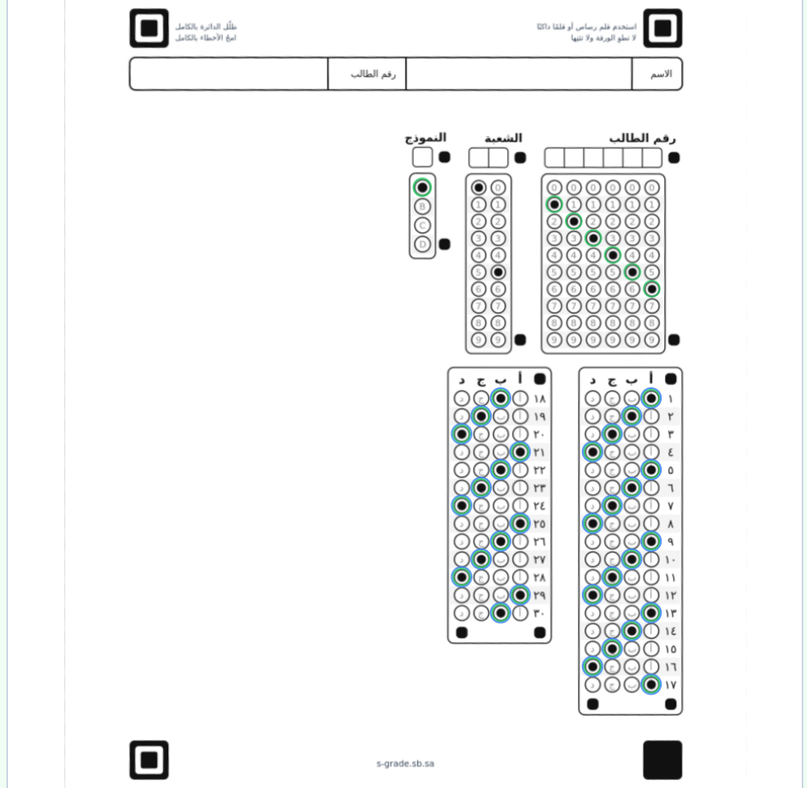
profile: `perspective_mild` · 414 passed · 0 failed



INPUT



WARPED



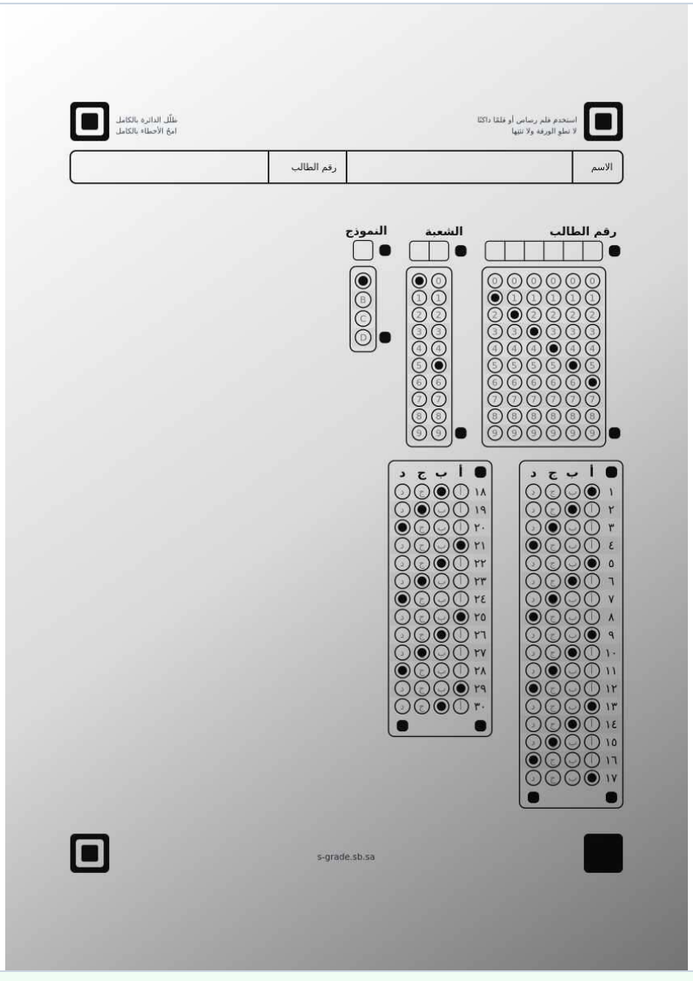
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

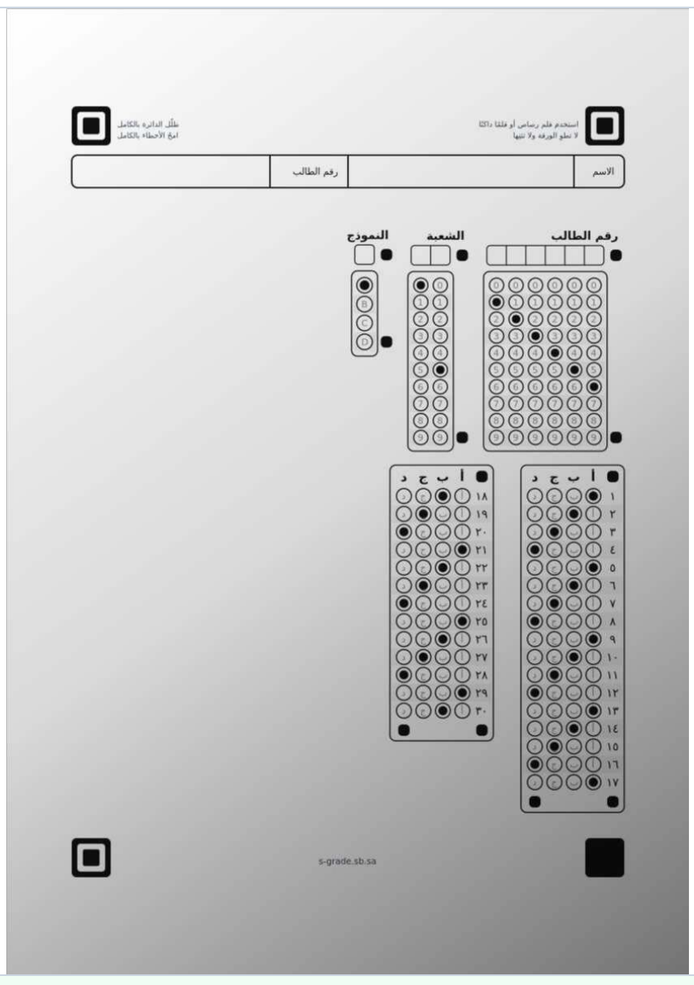
result.json

[AR] 30q · wide margins · lighting gradient + jpeg q50 PASS

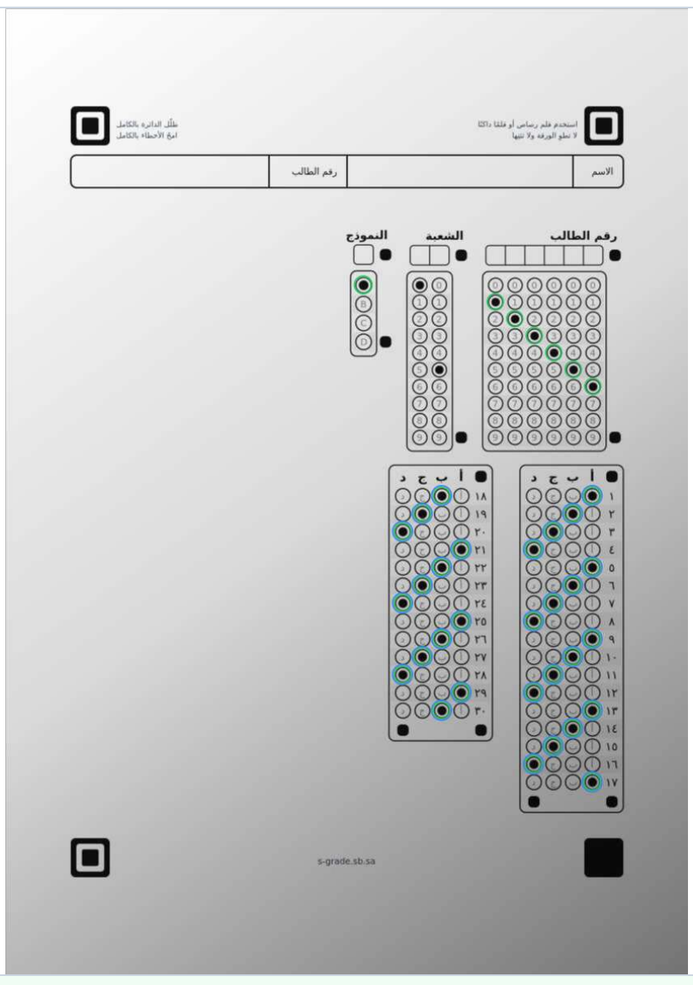
profile: `lighting_gradient → jpeg_q50` · 414 passed · 0 failed



INPUT



WARPED



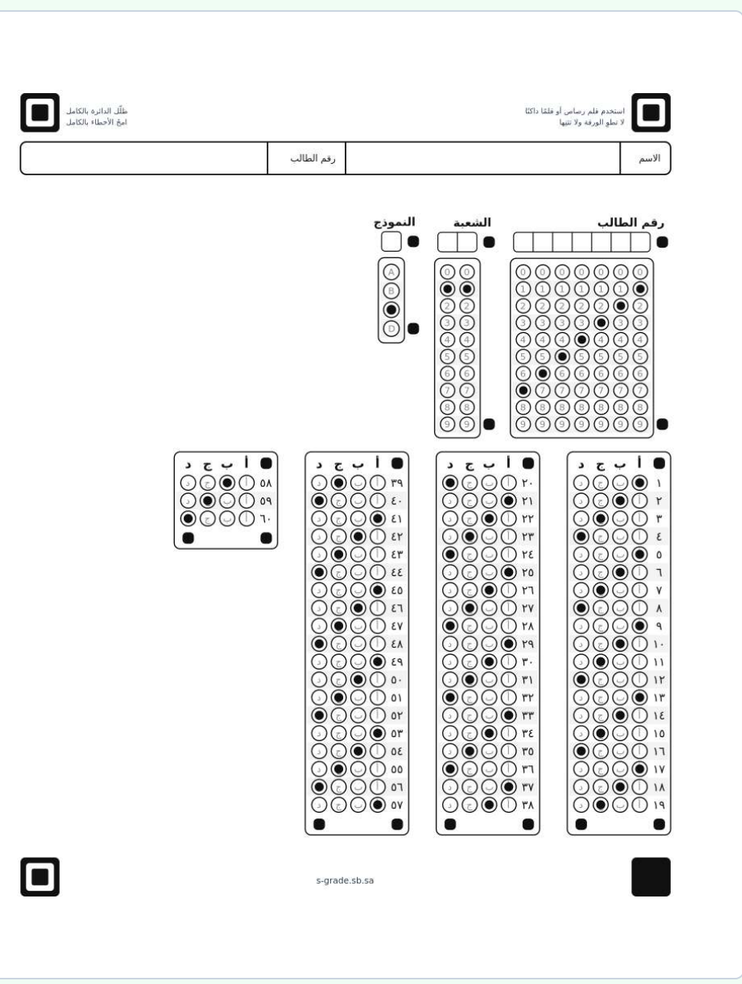
OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`A`	`A`	✓
section	`05`	`05`	✓
score	`30`	`30`	✓

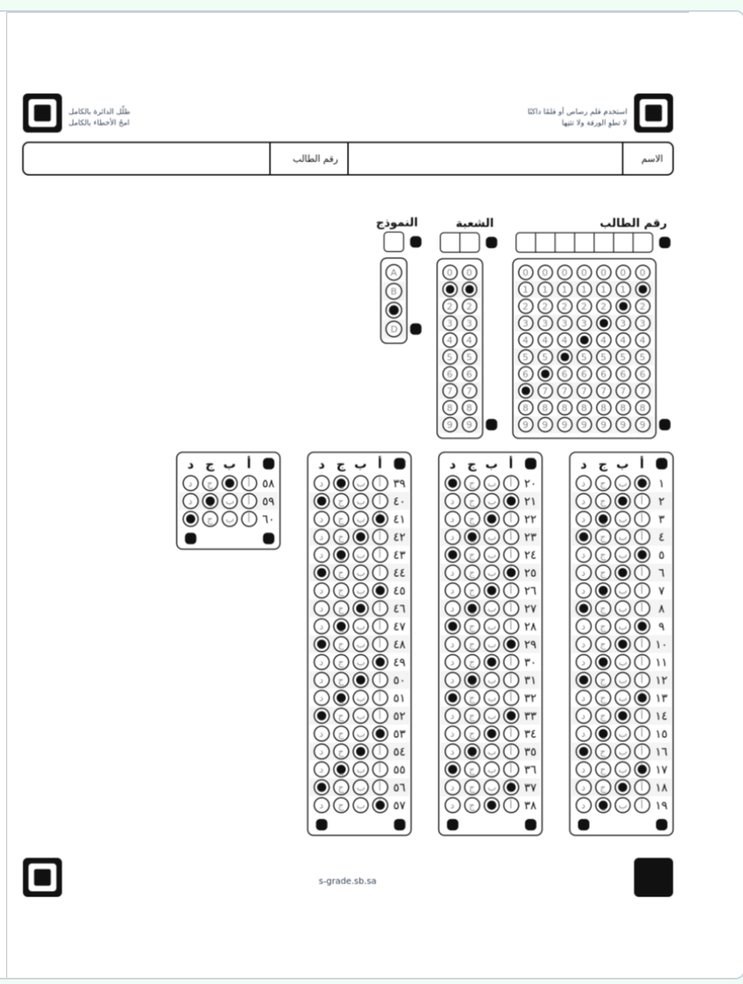
result.json

[AR] 60q · split margins (H=5,V=25) · pristine PASS

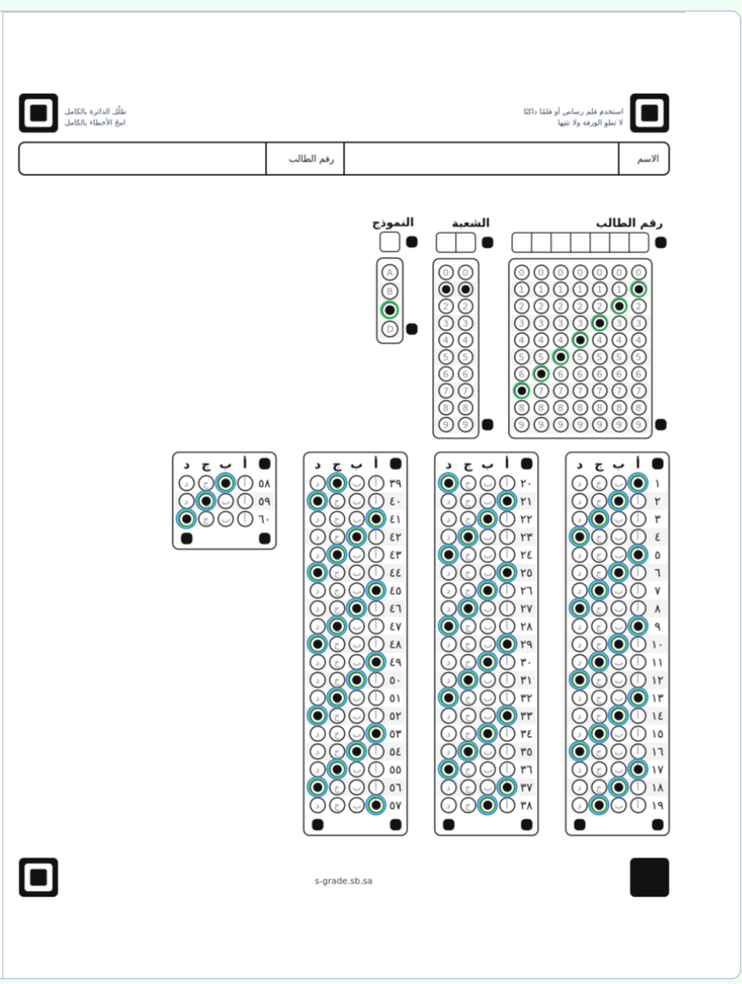
profile: `pristine` · 674 passed · 0 failed



INPUT



WARPED



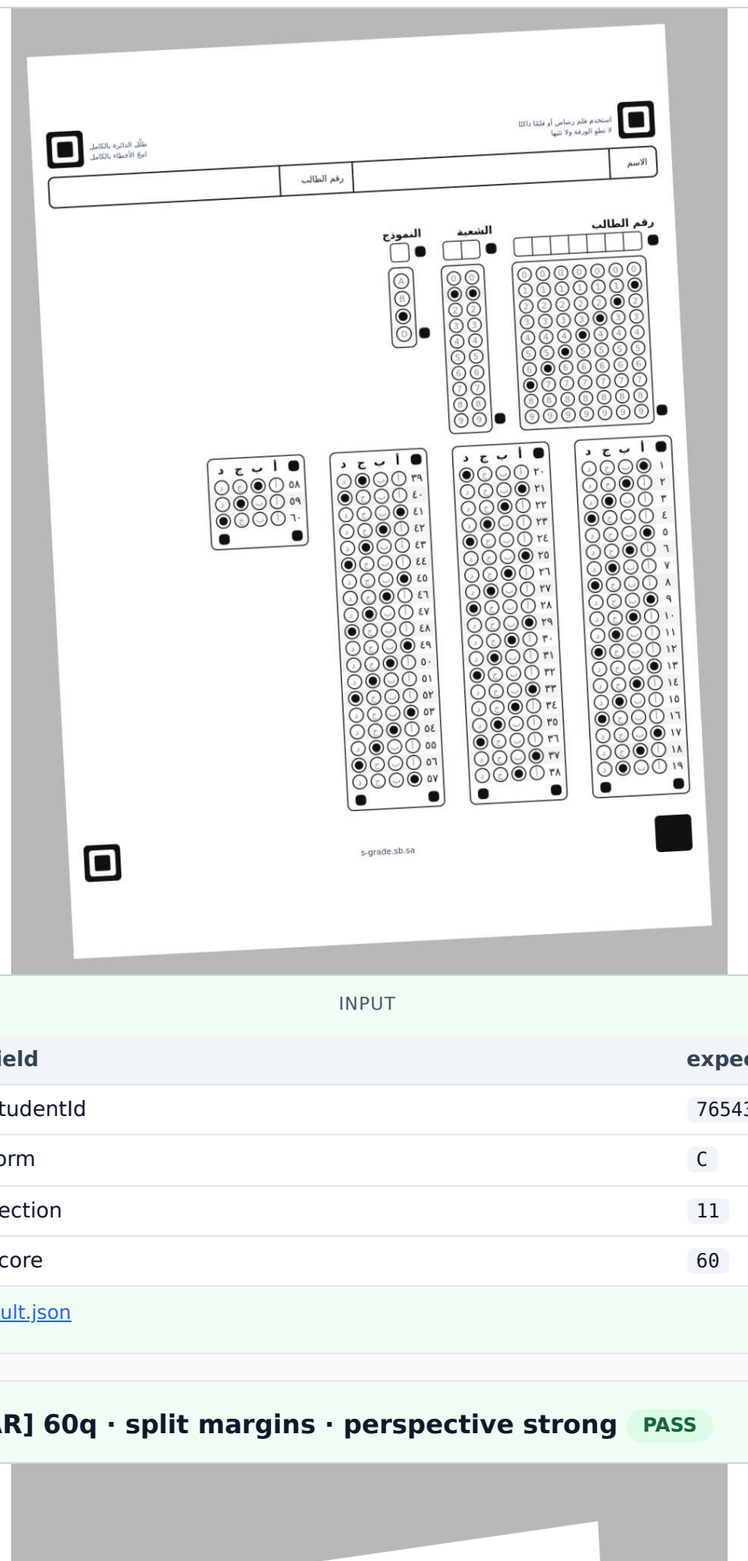
OVERLAY

field	expected	actual	
studentId	`7654321`	`7654321`	✓
form	`C`	`C`	✓
section	`11`	`11`	✓
score	`60`	`60`	✓

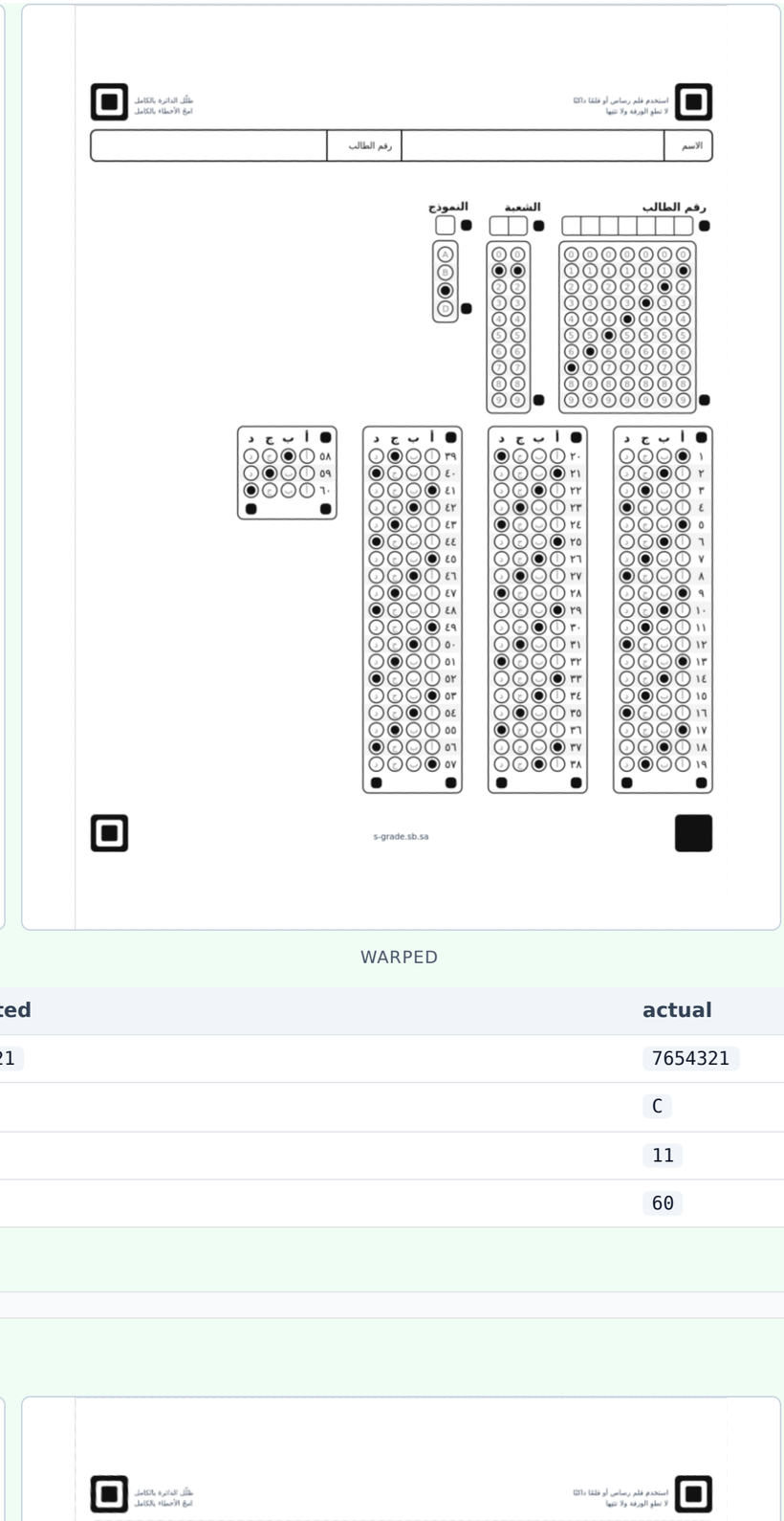
result.json

[AR] 60q · split margins · rotation -3deg PASS

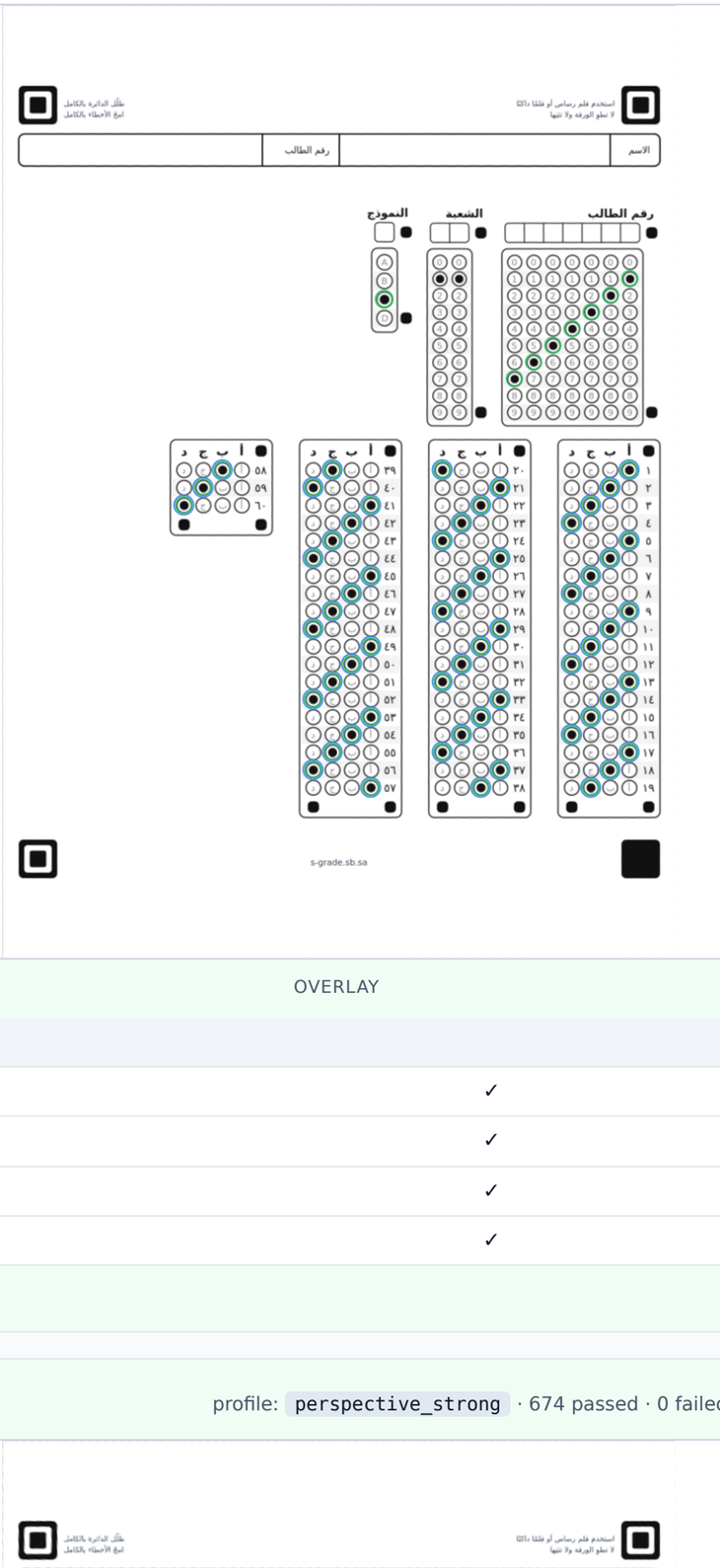
profile: `rotated_neg3deg` · 674 passed · 0 failed



INPUT



WARPED



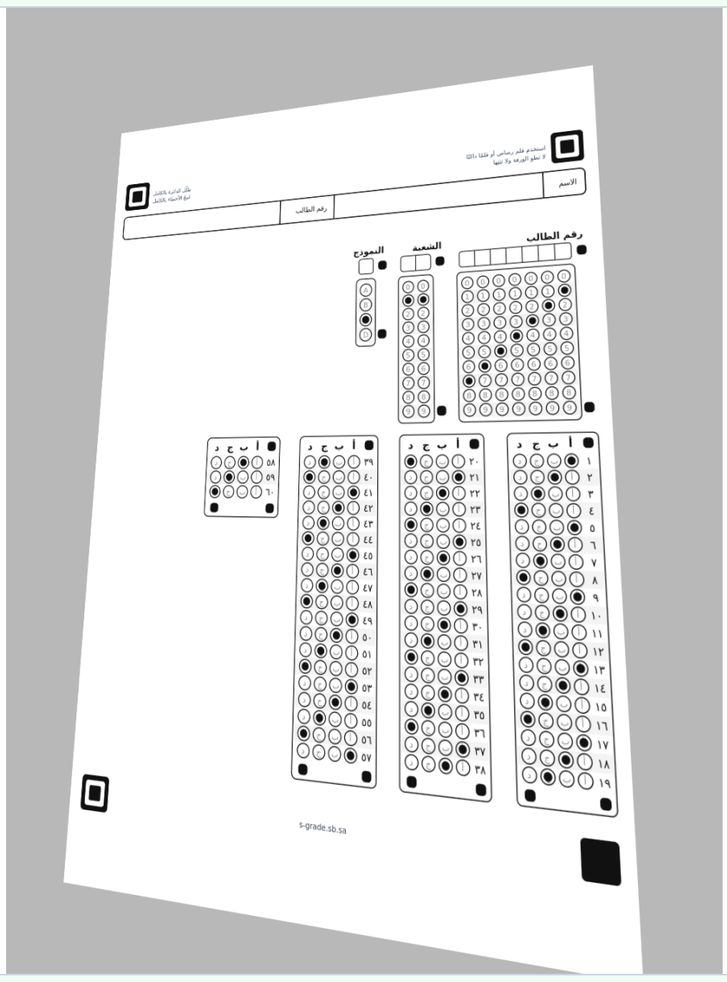
OVERLAY

field	expected	actual	
studentId	`7654321`	`7654321`	✓
form	`C`	`C`	✓
section	`11`	`11`	✓
score	`60`	`60`	✓

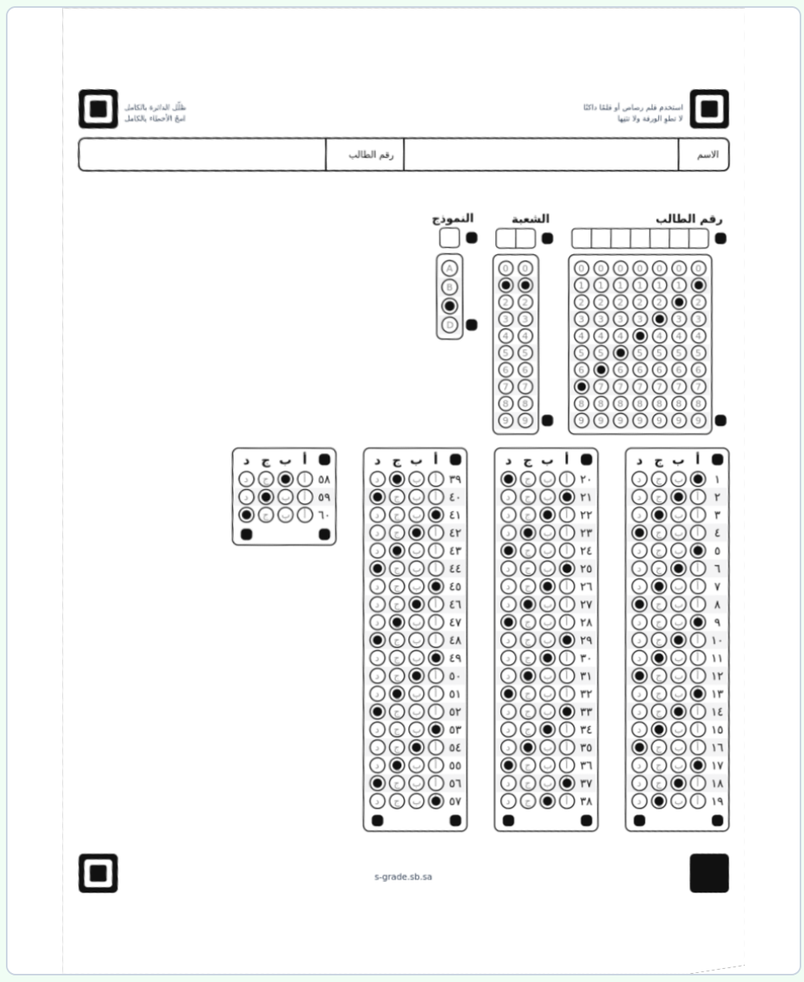
result.json

[AR] 60q · split margins · perspective strong PASS

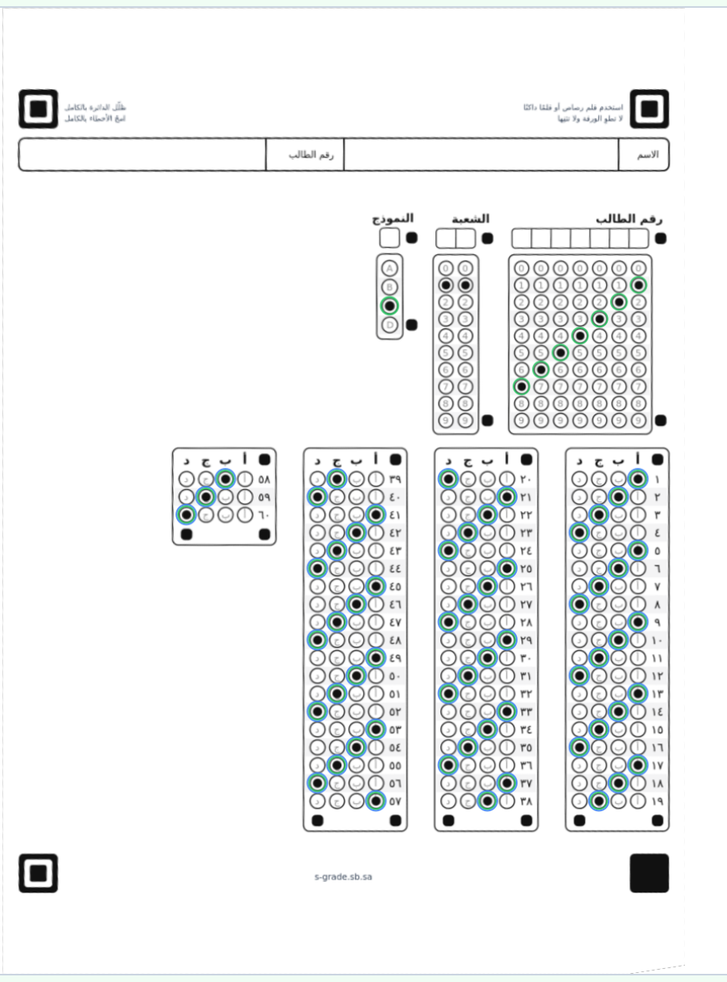
profile: `perspective_strong` · 674 passed · 0 failed



INPUT



WARPED



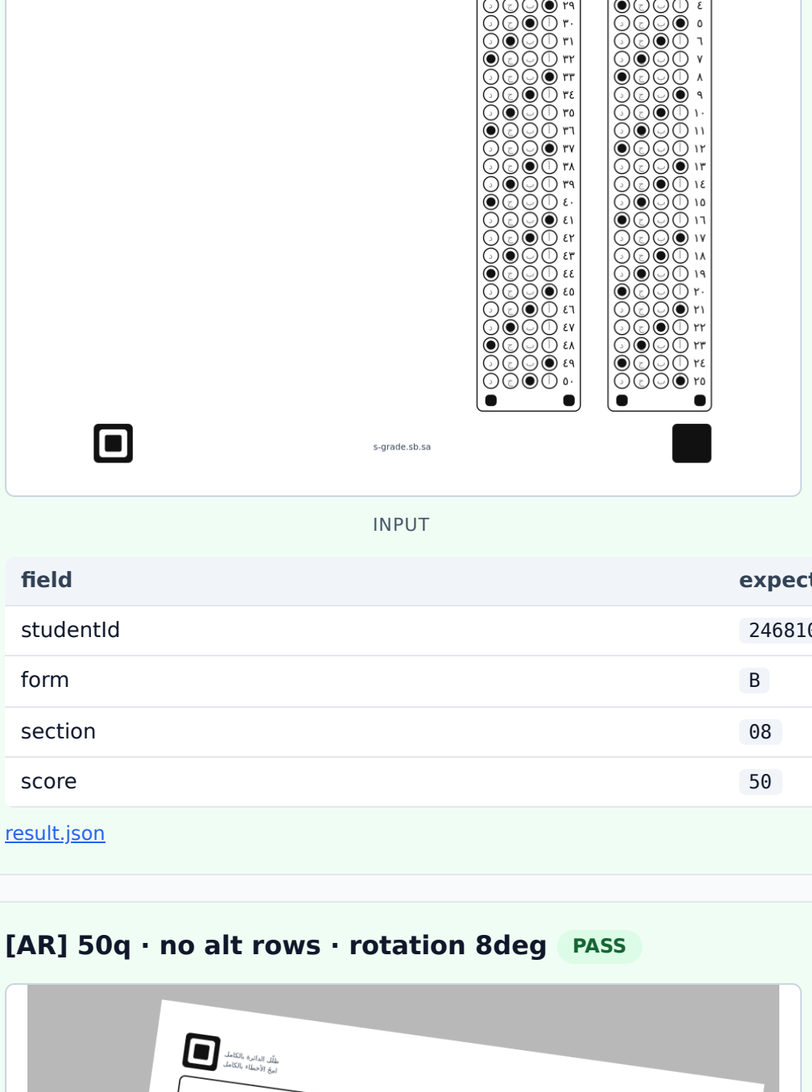
OVERLAY

field	expected	actual	
studentId	`7654321`	`7654321`	✓
form	`C`	`C`	✓
section	`11`	`11`	✓
score	`60`	`60`	✓

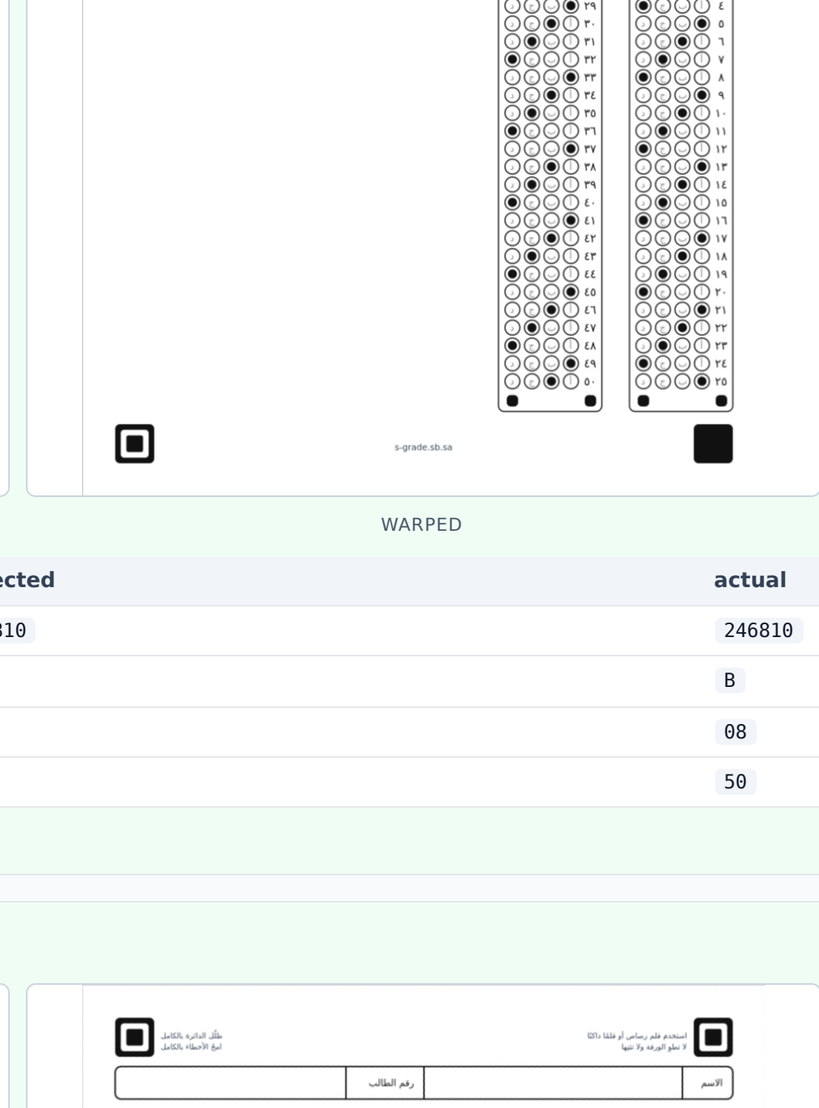
result.json

[AR] 50q · no alt rows · pristine PASS

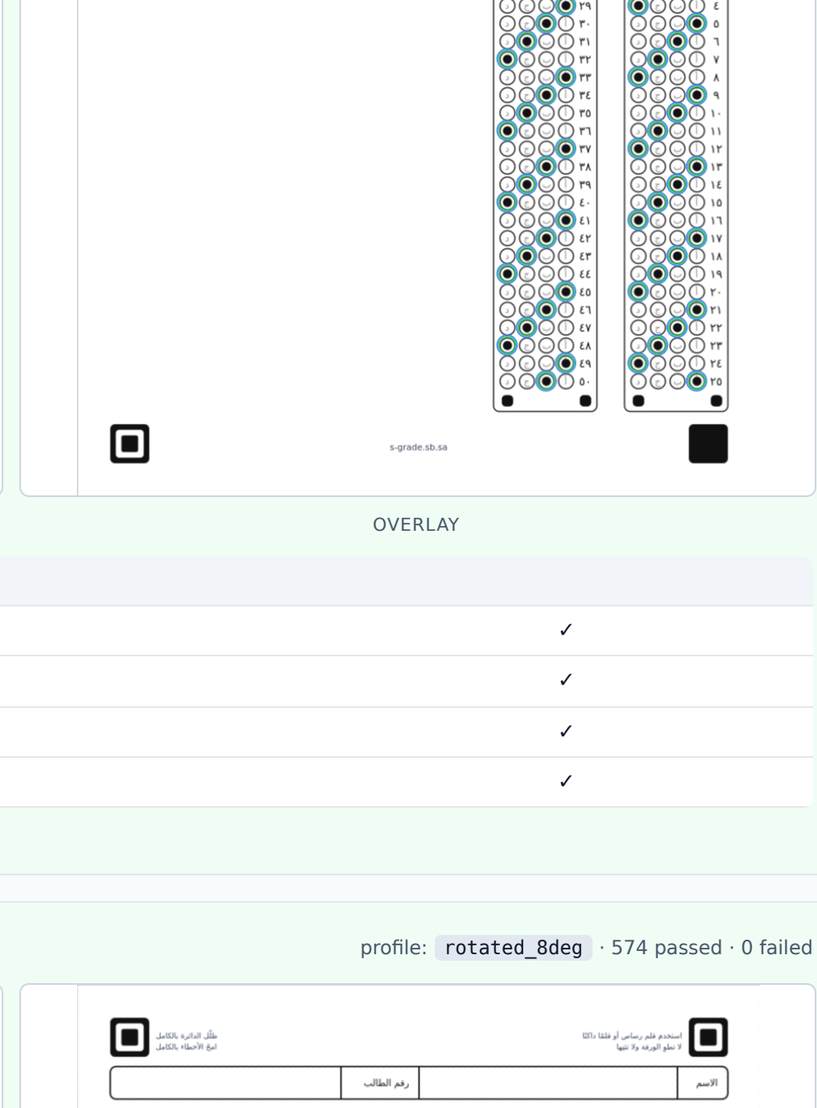
profile: `pristine` · 574 passed · 0 failed



INPUT



WARPED



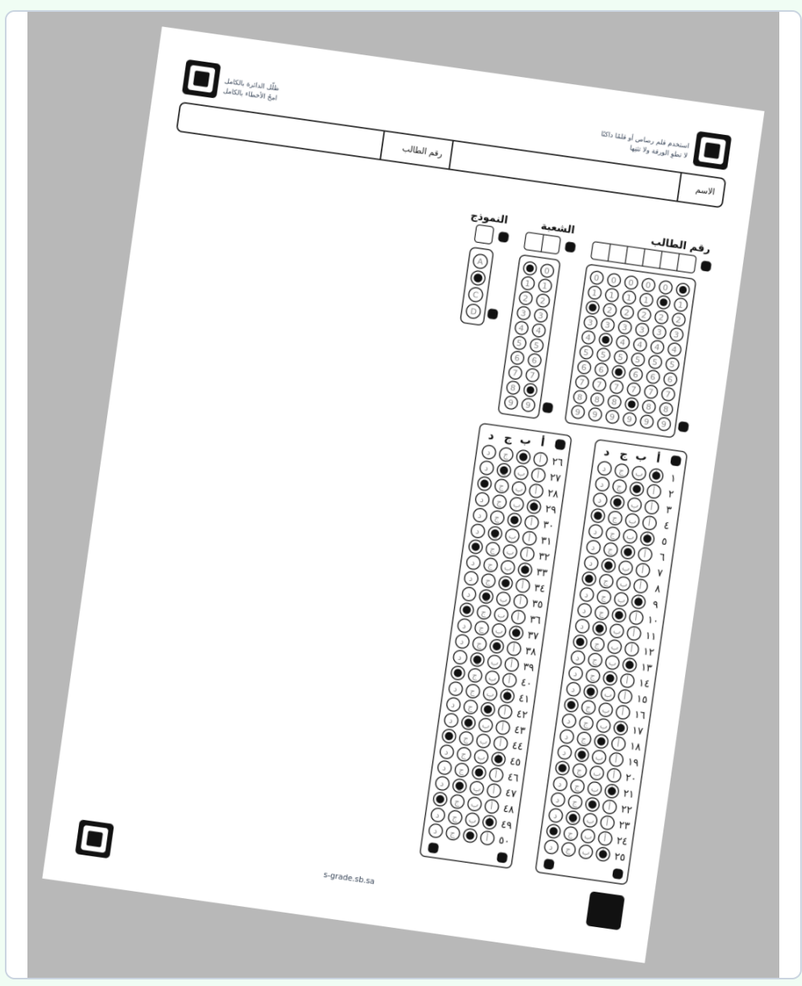
OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

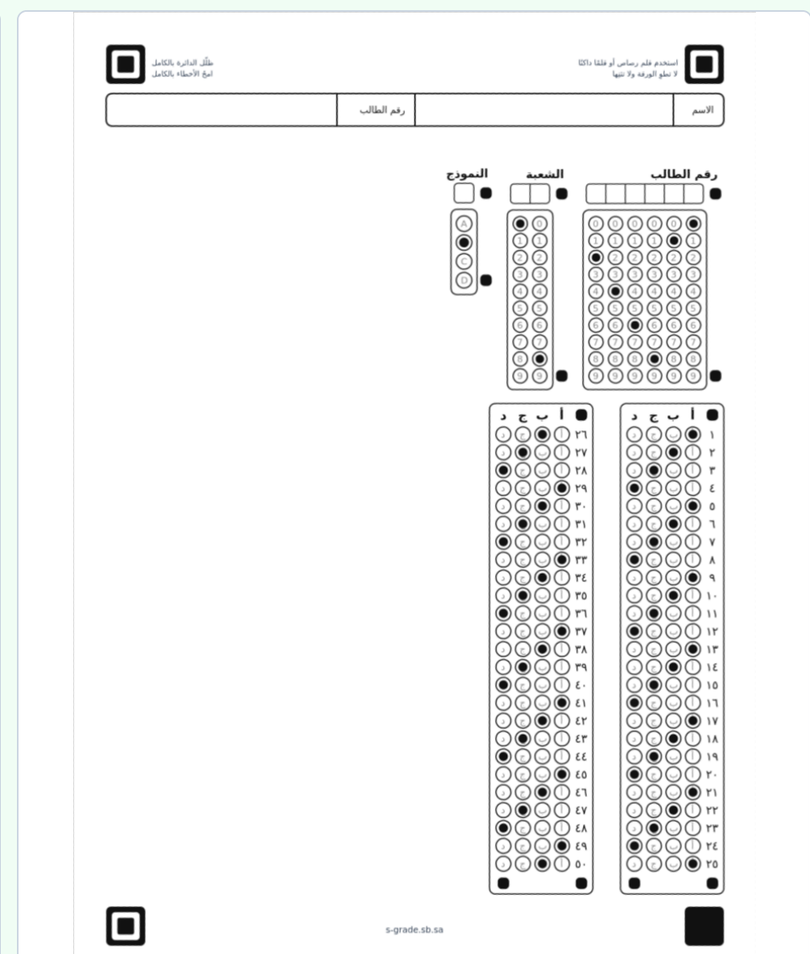
result.json

[AR] 50q · no alt rows · rotation 8deg PASS

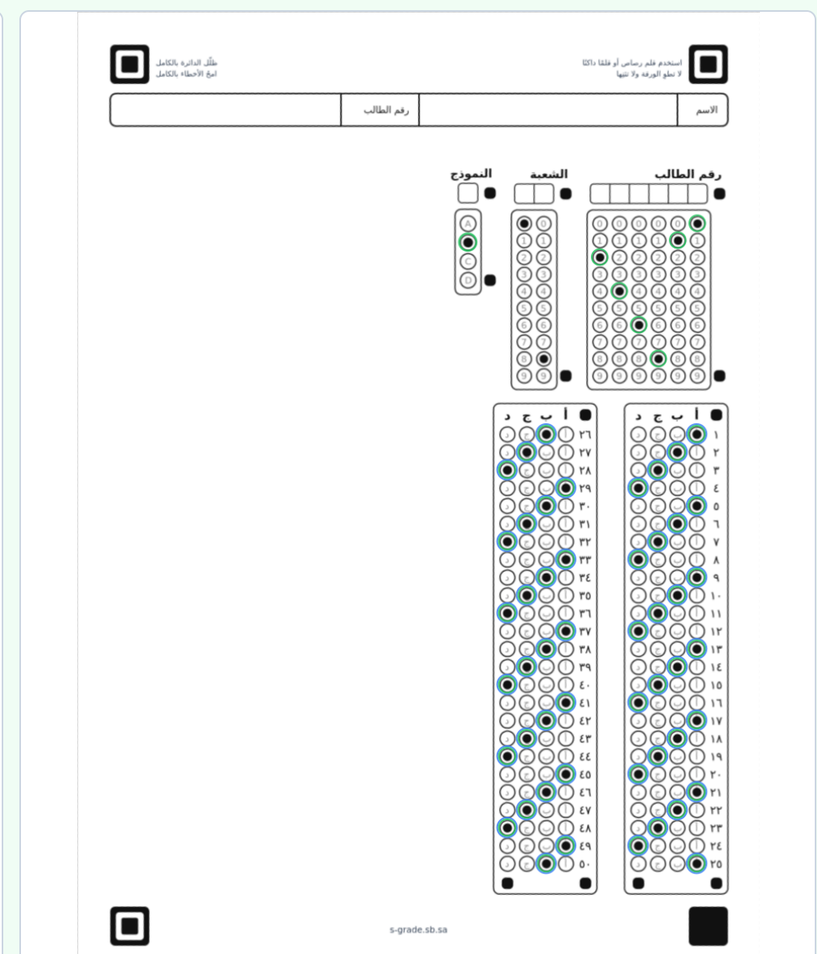
profile: `rotated_8deg` · 574 passed · 0 failed



INPUT



WARPED



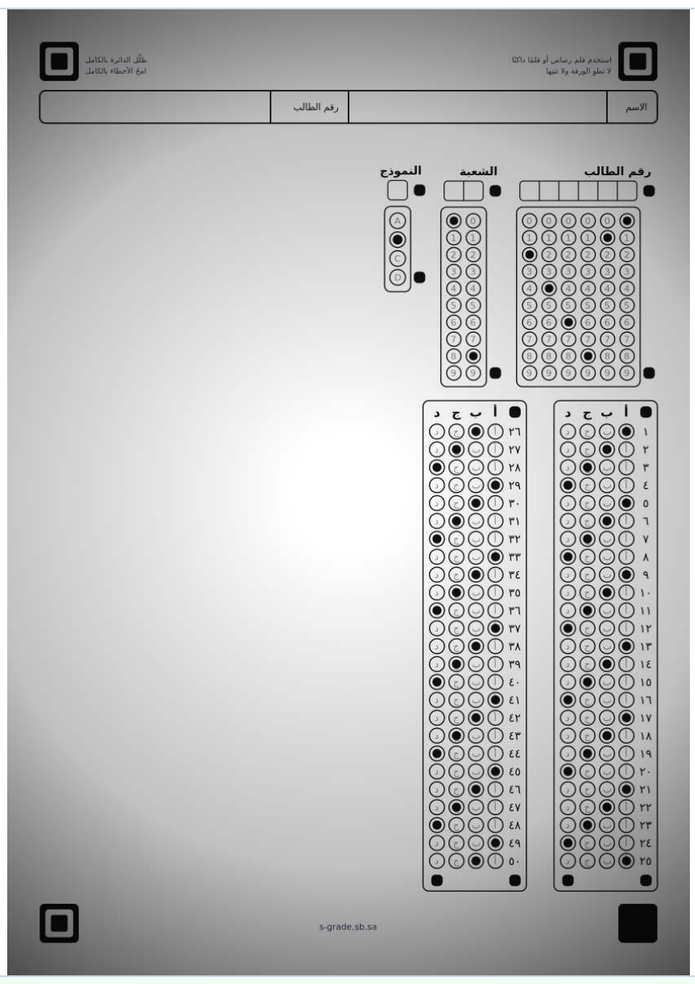
OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

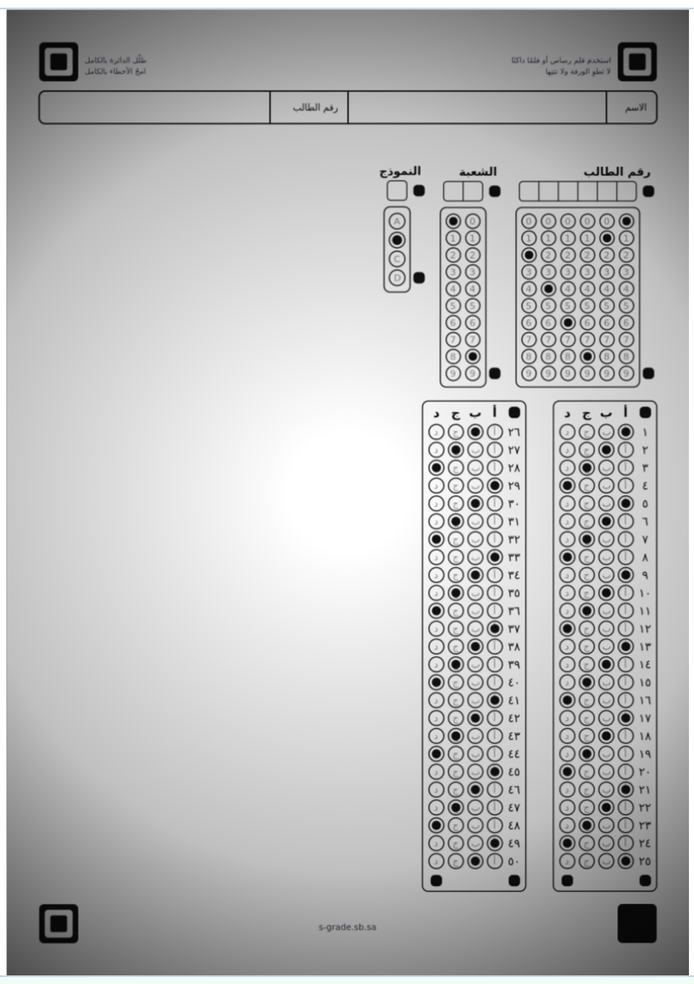
result.json

[AR] 50q · no alt rows · lighting vignette PASS

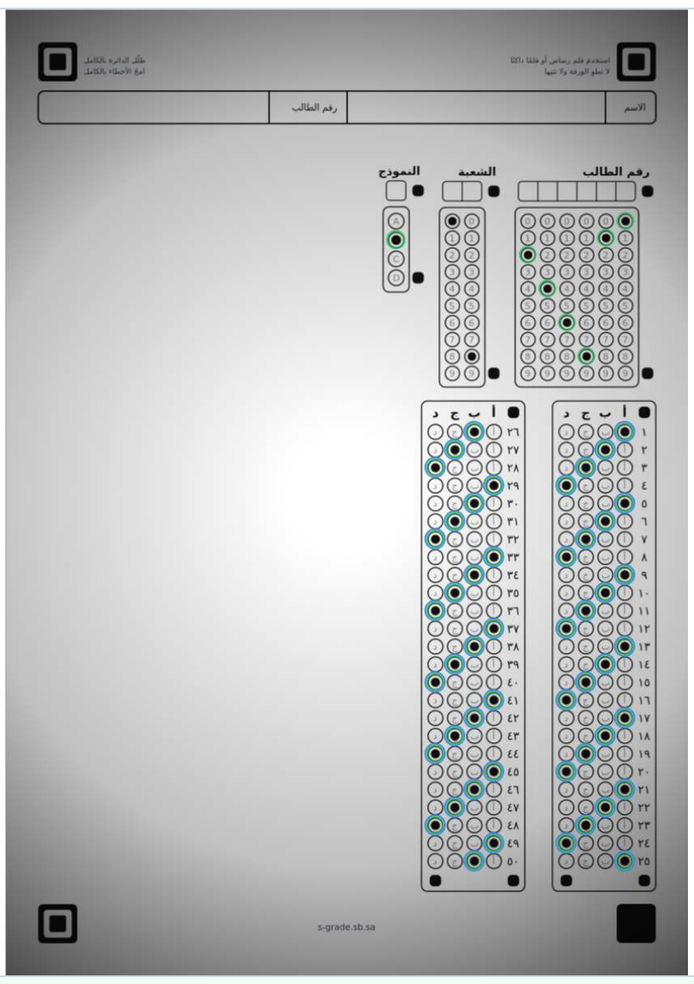
profile: `lighting_vignette` · 574 passed · 0 failed



INPUT



WARPED



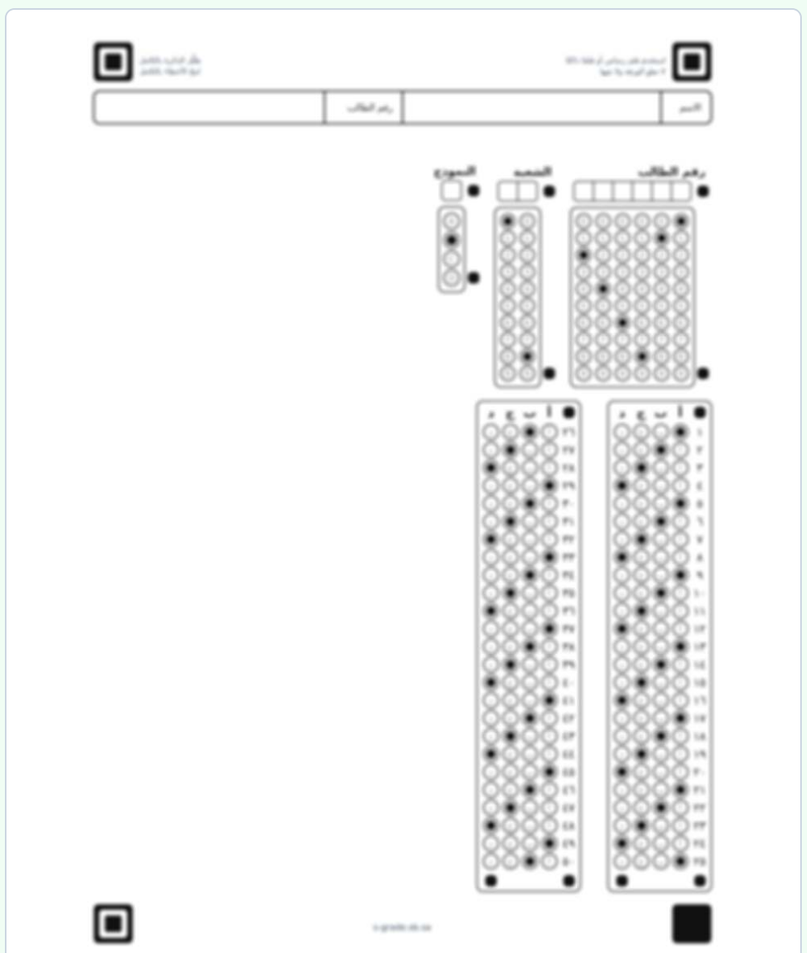
OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

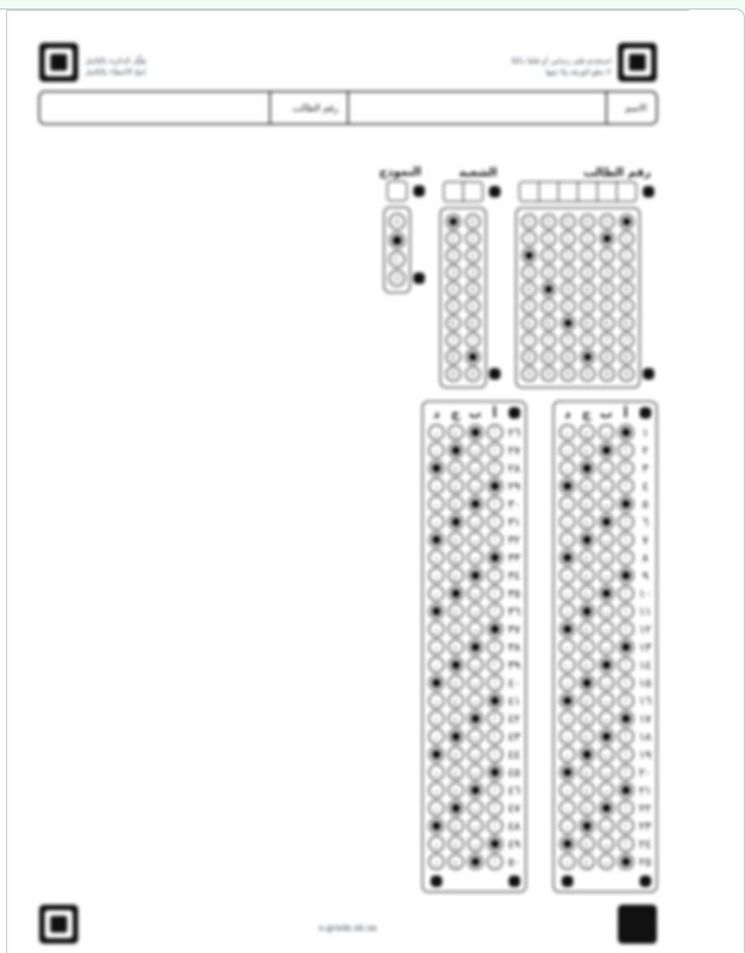
result.json

[AR] 50q · no alt rows · out of focus PASS

profile: `out_of_focus` · 574 passed · 0 failed



INPUT



WARPED



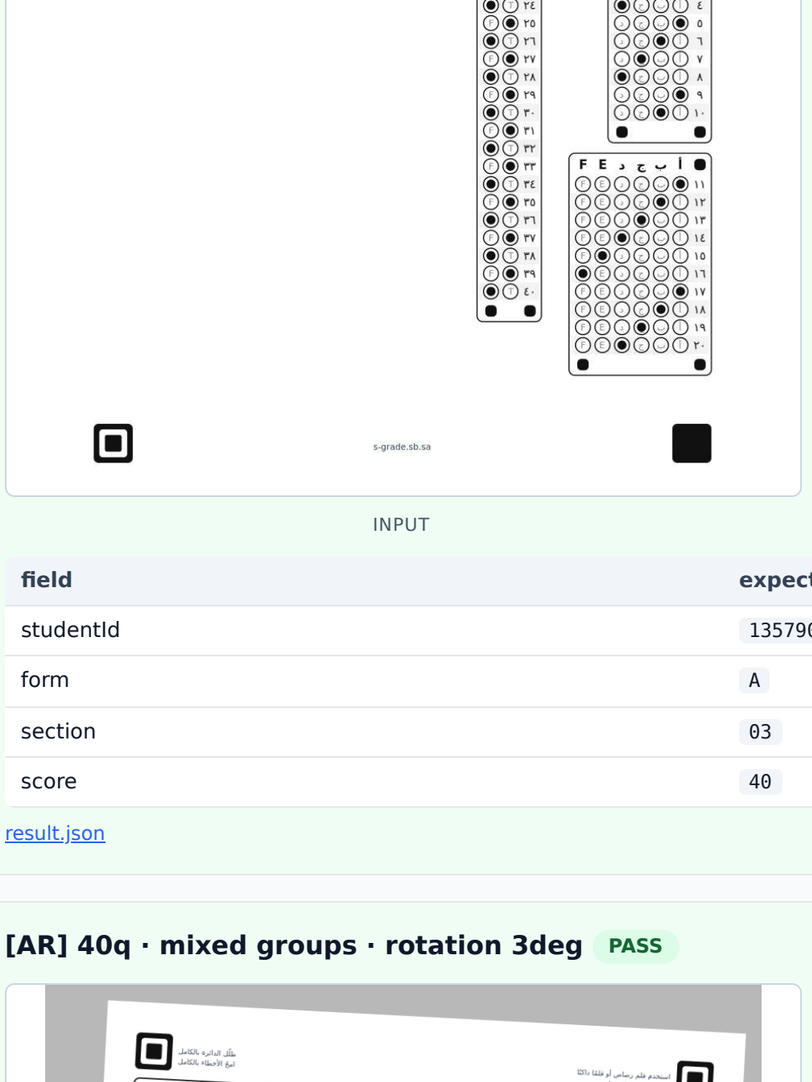
OVERLAY

field	expected	actual	
studentId	`246810`	`246810`	✓
form	`B`	`B`	✓
section	`08`	`08`	✓
score	`50`	`50`	✓

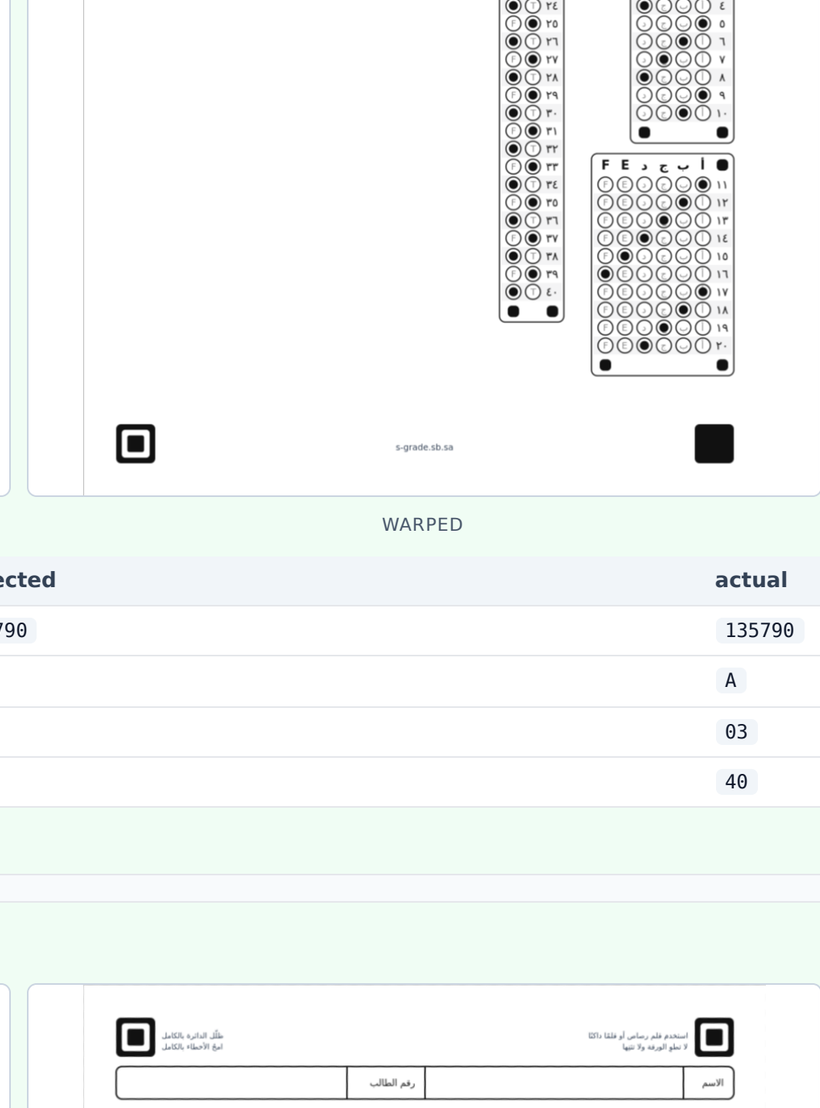
result.json

[AR] 40q · mixed groups (A-D + A-F + T,F) · pristine PASS

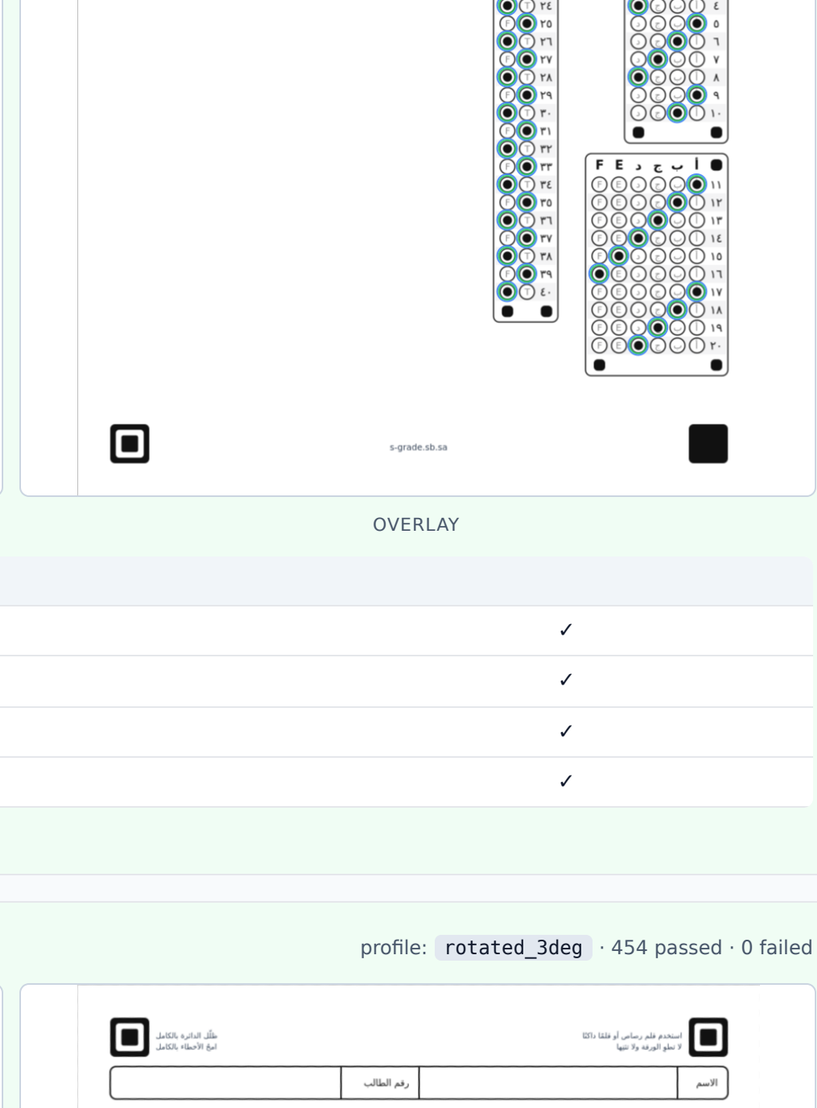
profile: `pristine` · 454 passed · 0 failed



INPUT



WARPED



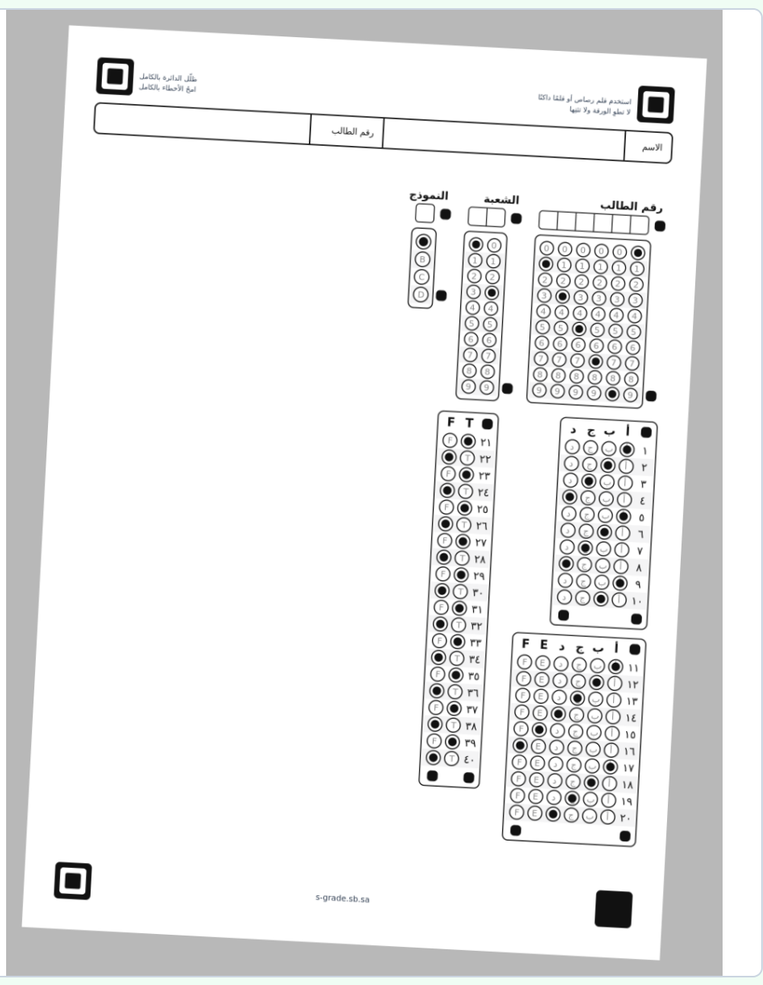
OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

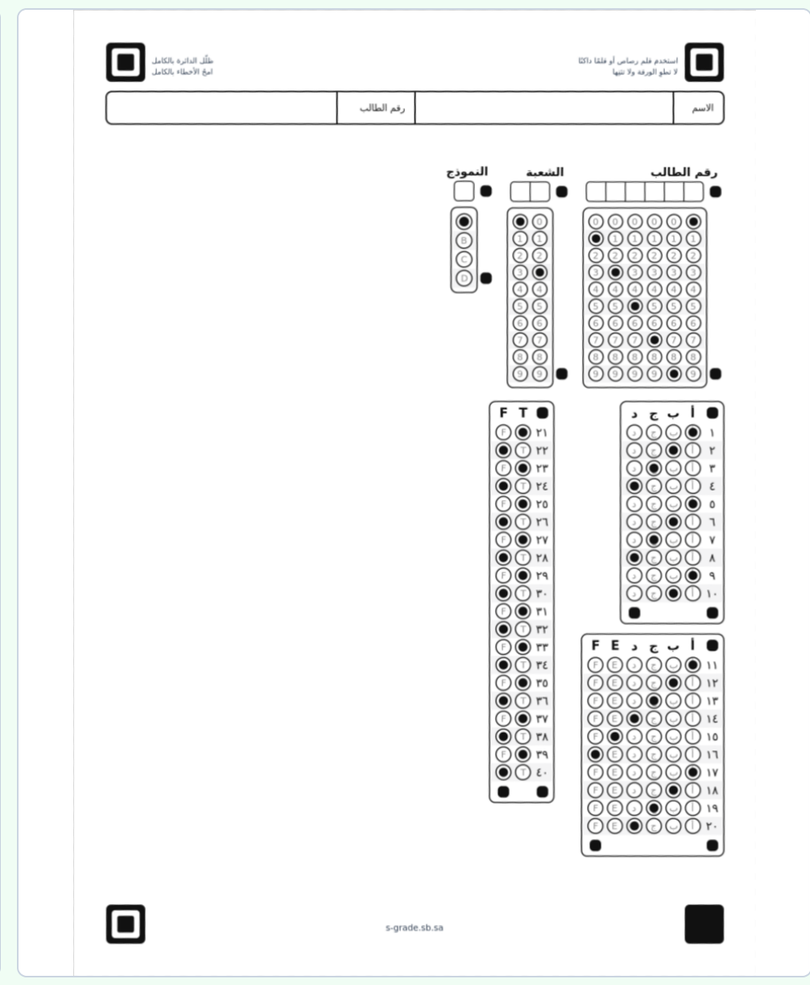
result.json

[AR] 40q · mixed groups · rotation 3deg PASS

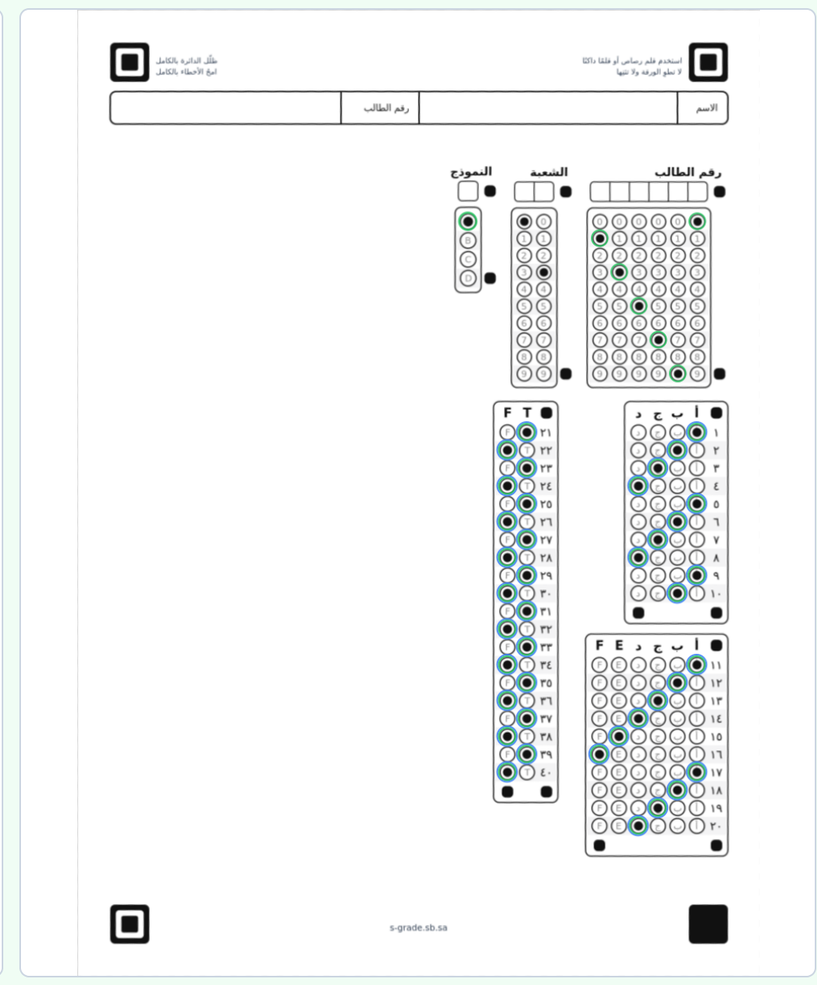
profile: `rotated_3deg` · 454 passed · 0 failed



INPUT



WARPED



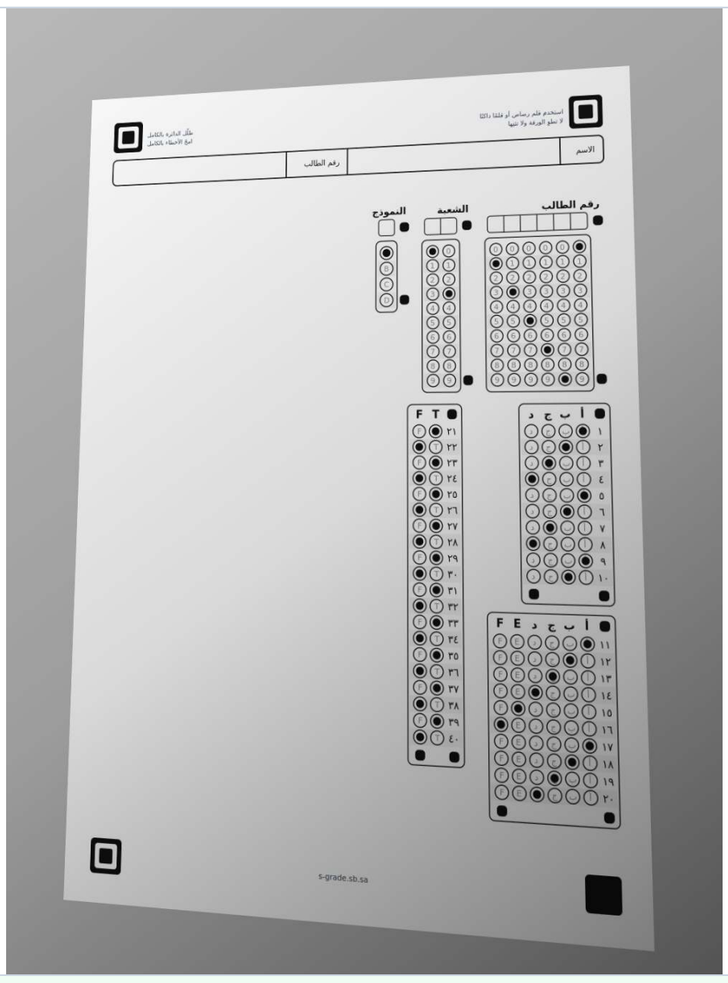
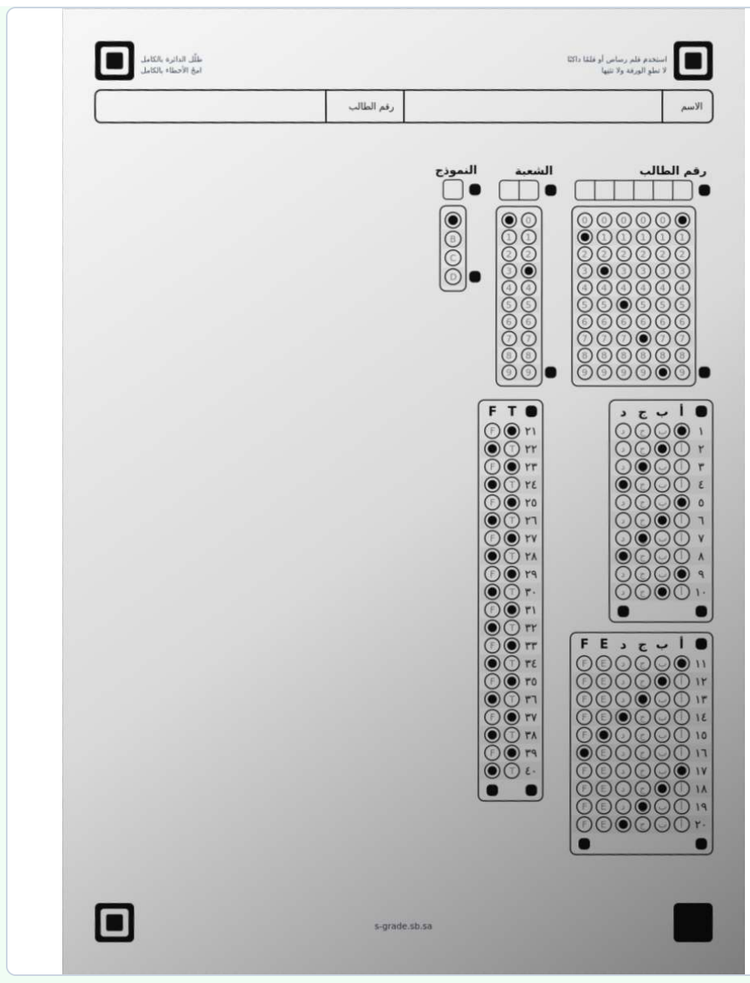
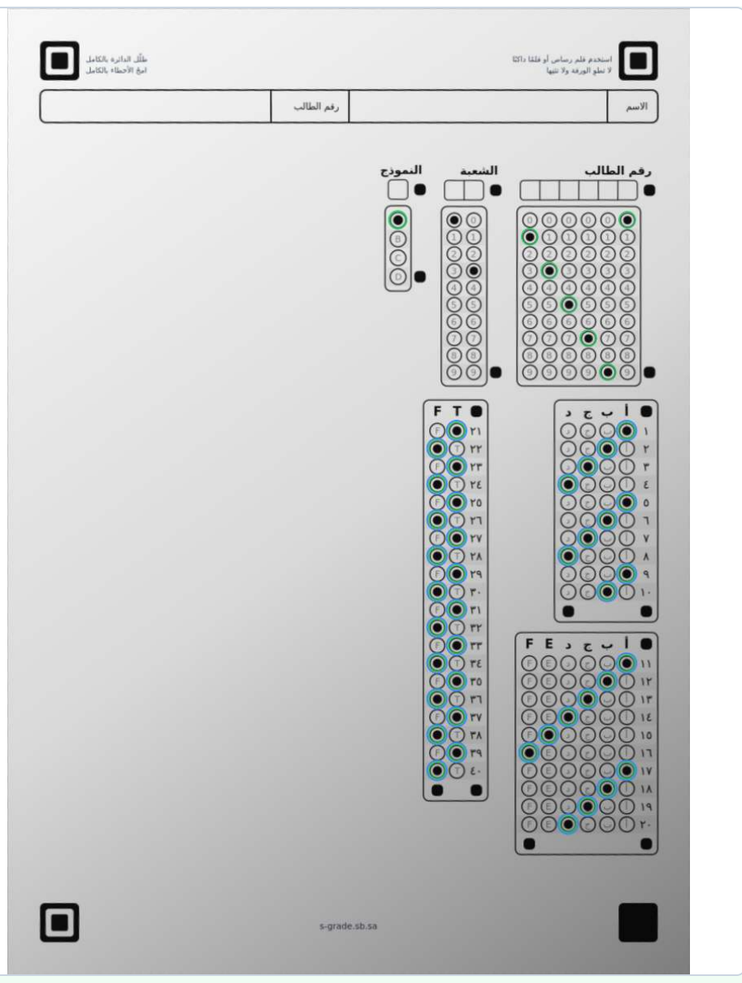
OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

result.json

[AR] 40q · mixed groups · perspective mild + lighting gradient PASS

profile: `perspective_mild → lighting_gradient` · 454 passed · 0 failed

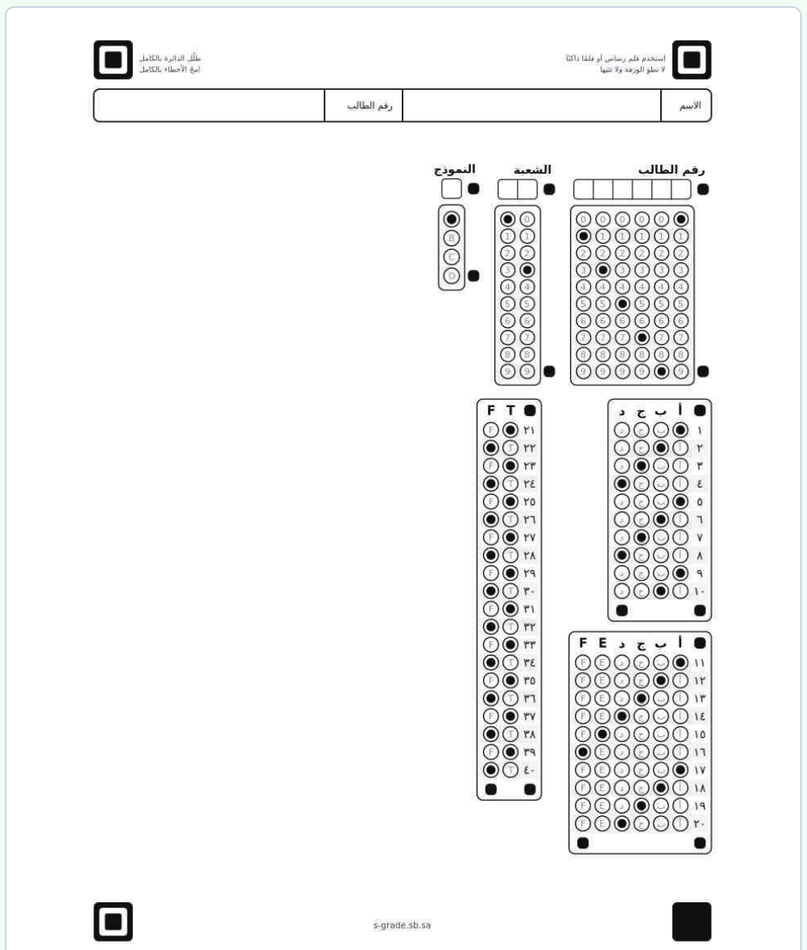
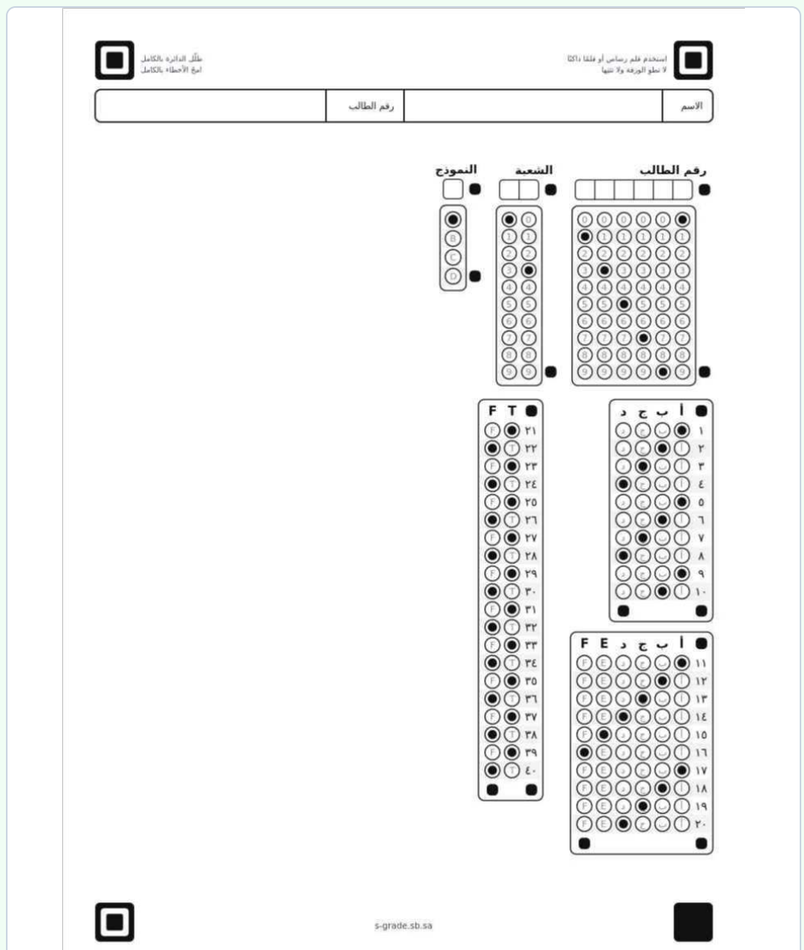
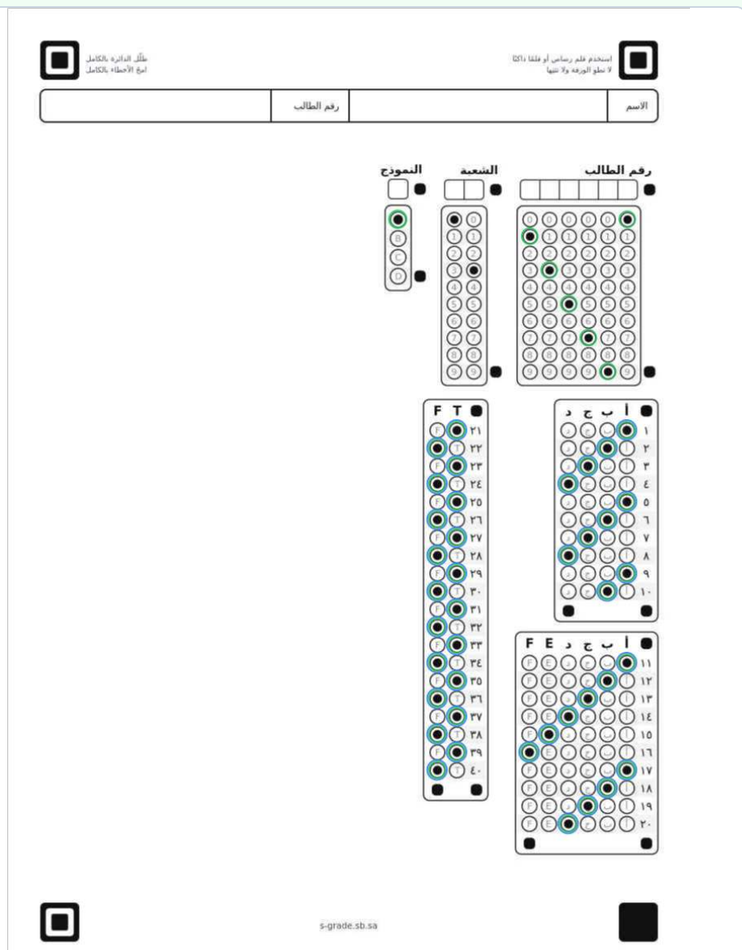
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

result.json

[AR] 40q · mixed groups · jpeg q30 PASS

profile: `jpeg_q30` · 454 passed · 0 failed

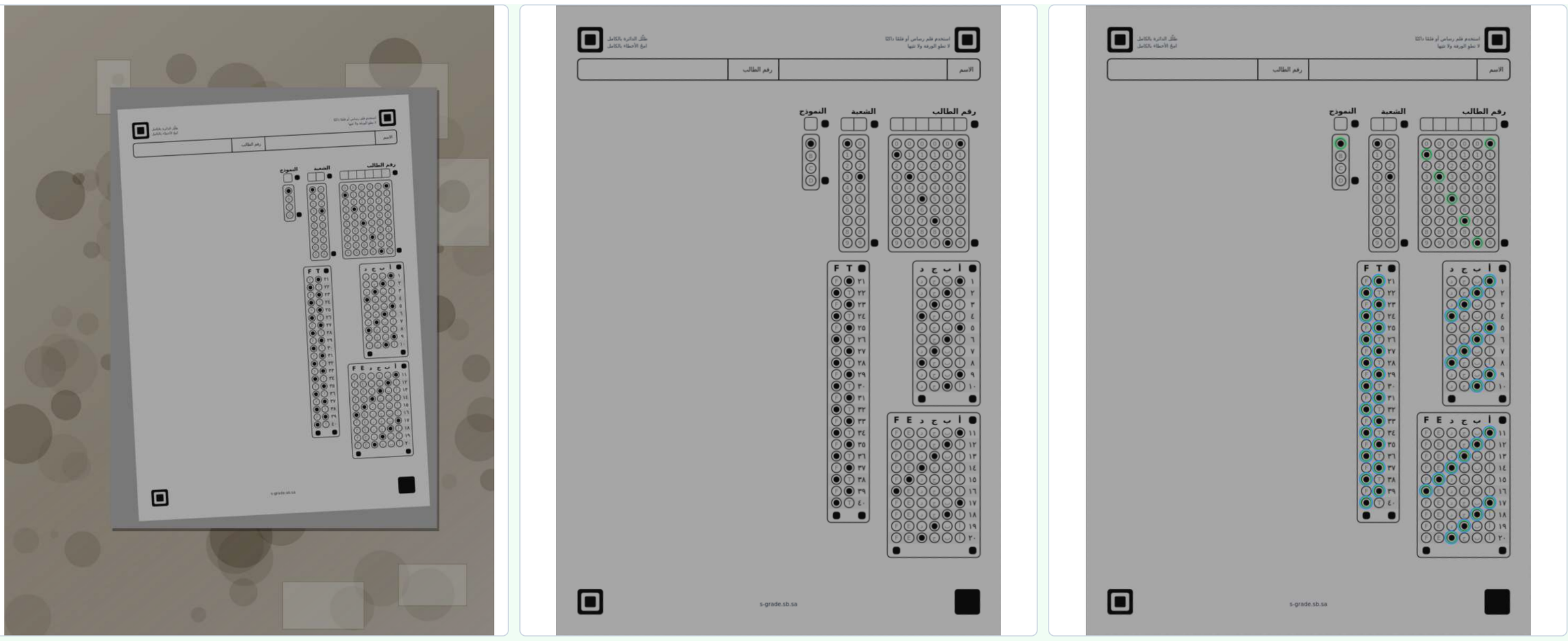
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

result.json

[AR] 40q · mixed groups · scene cluttered dark PASS

profile: `scene_cluttered_dark` · 454 passed · 0 failed



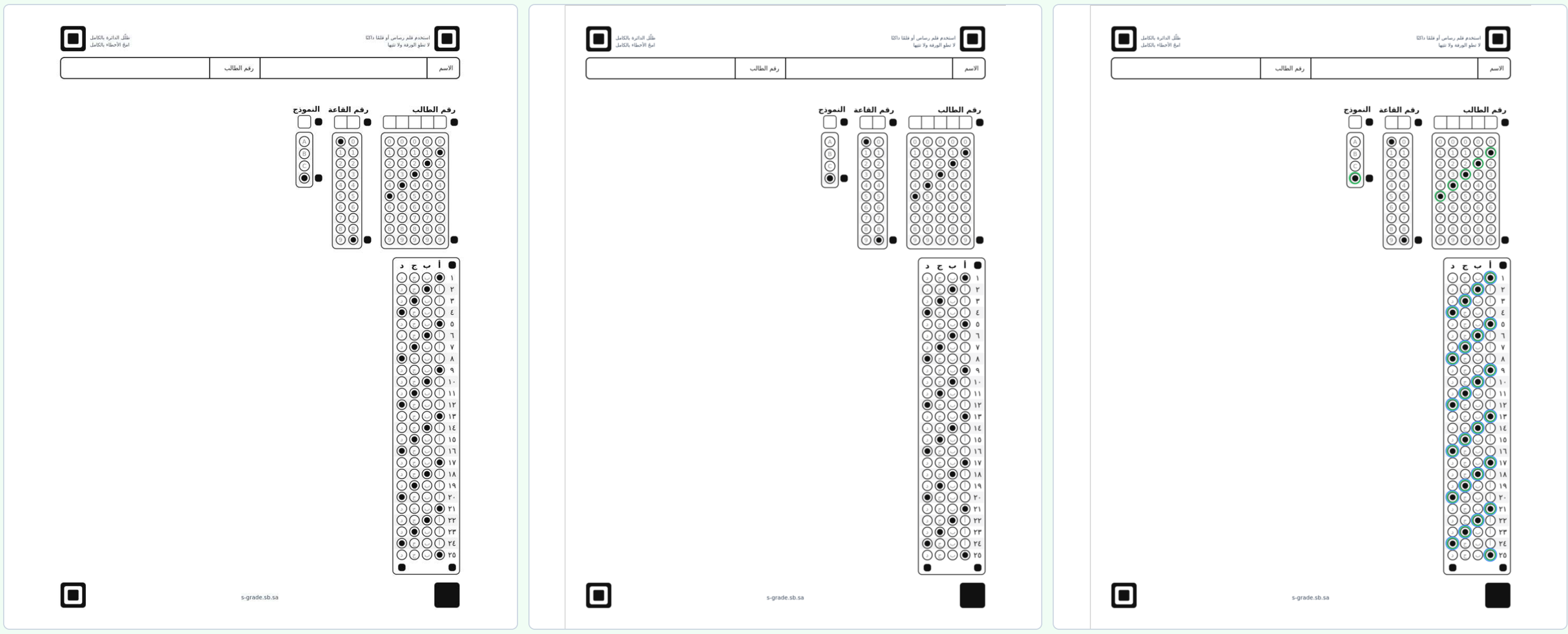
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`135790`	`135790`	✓
form	`A`	`A`	✓
section	`03`	`03`	✓
score	`40`	`40`	✓

result.json

[AR] 25q · custom zone titles · pristine PASS

profile: `pristine` · 354 passed · 0 failed



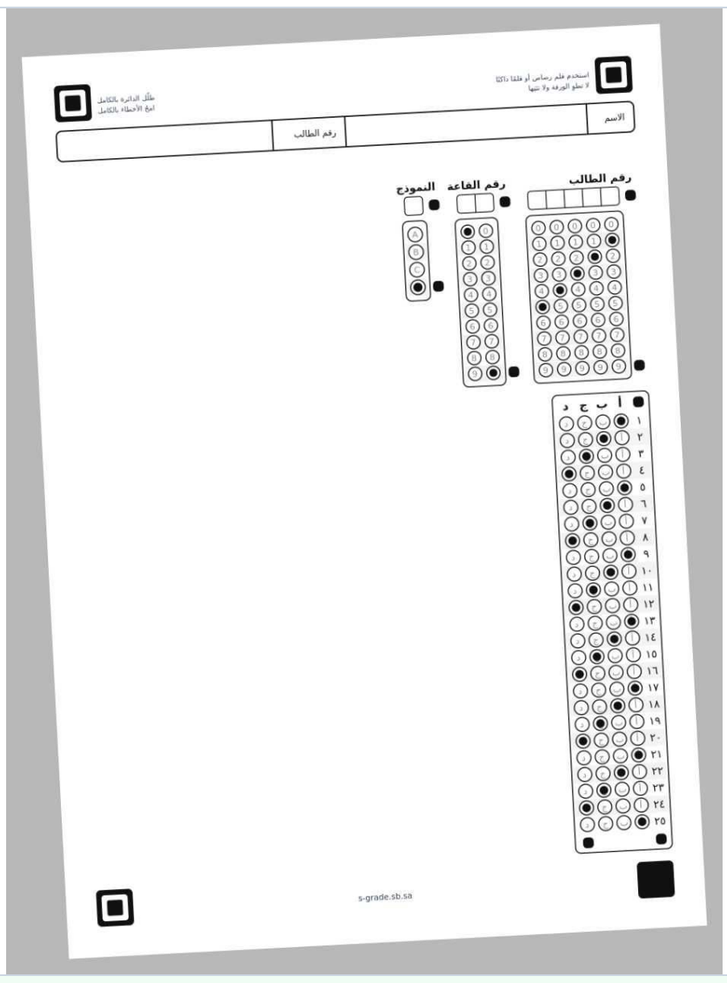
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`54321`	`54321`	✓
form	`D`	`D`	✓
section	`09`	`09`	✓
score	`25`	`25`	✓

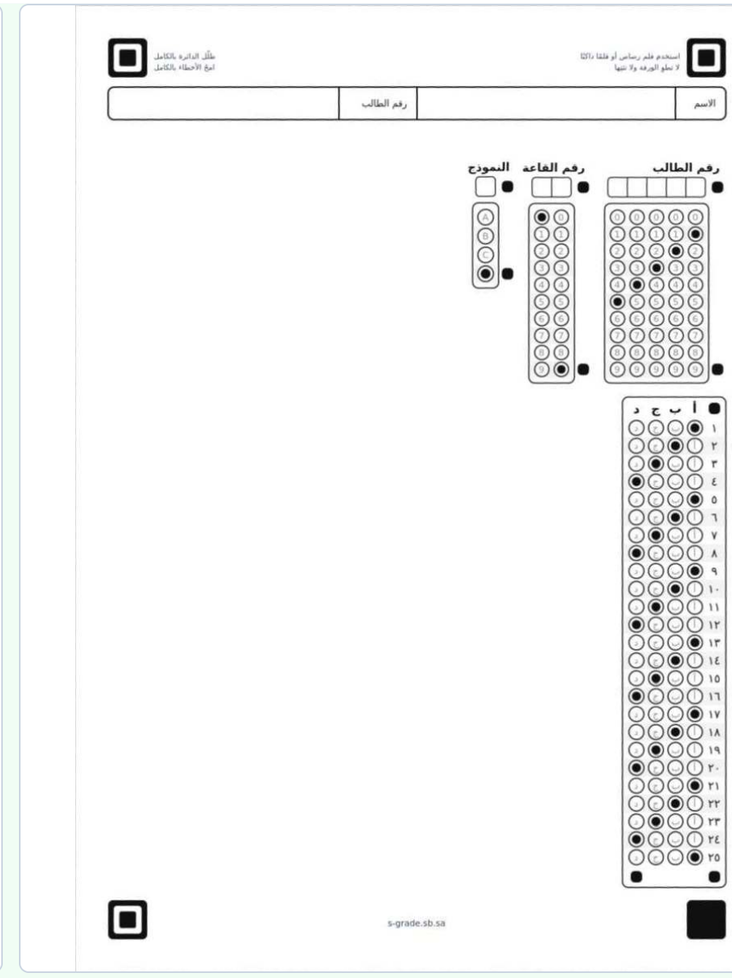
result.json

[AR] 25q · custom zone titles · rotation -3deg + jpeg PASS

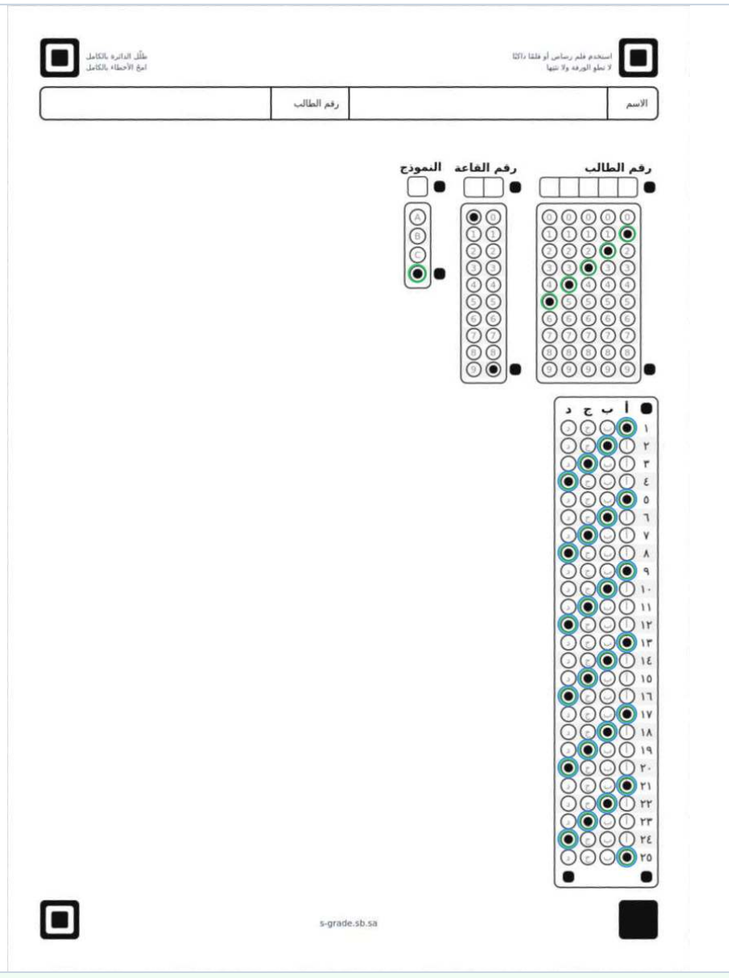
profile: `rotated_neg3deg → jpeg_q50` · 354 passed · 0 failed



INPUT



WARPED



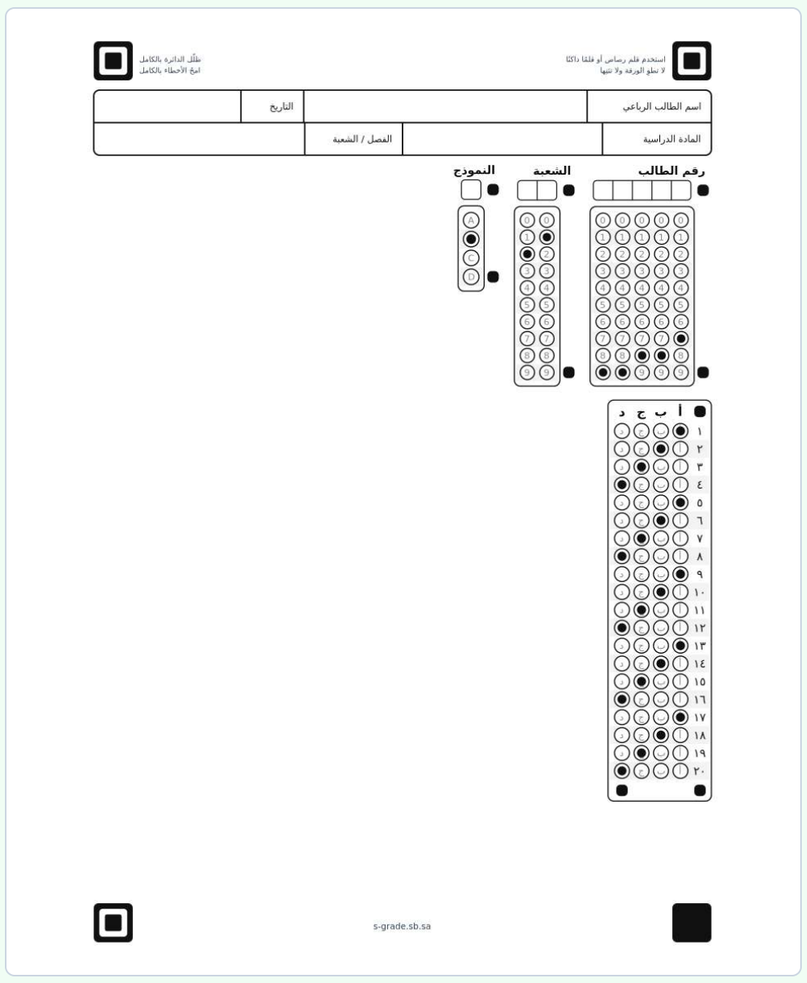
OVERLAY

field	expected	actual	
studentId	`54321`	`54321`	✓
form	`D`	`D`	✓
section	`09`	`09`	✓
score	`25`	`25`	✓

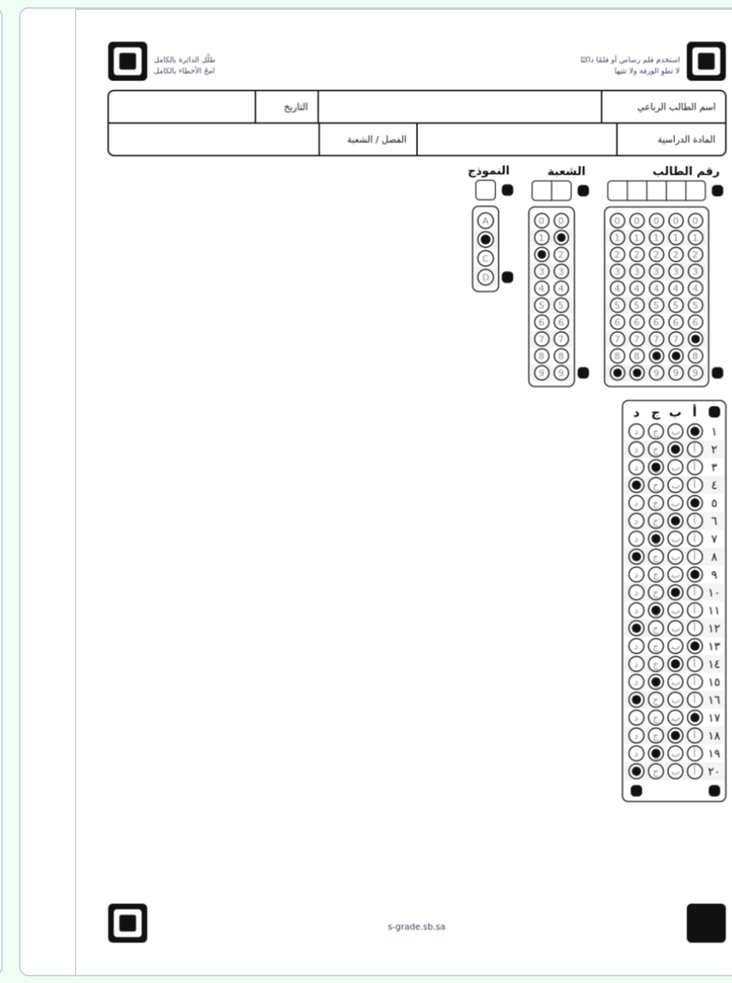
result.json

[AR] 20q · custom header fields · pristine PASS

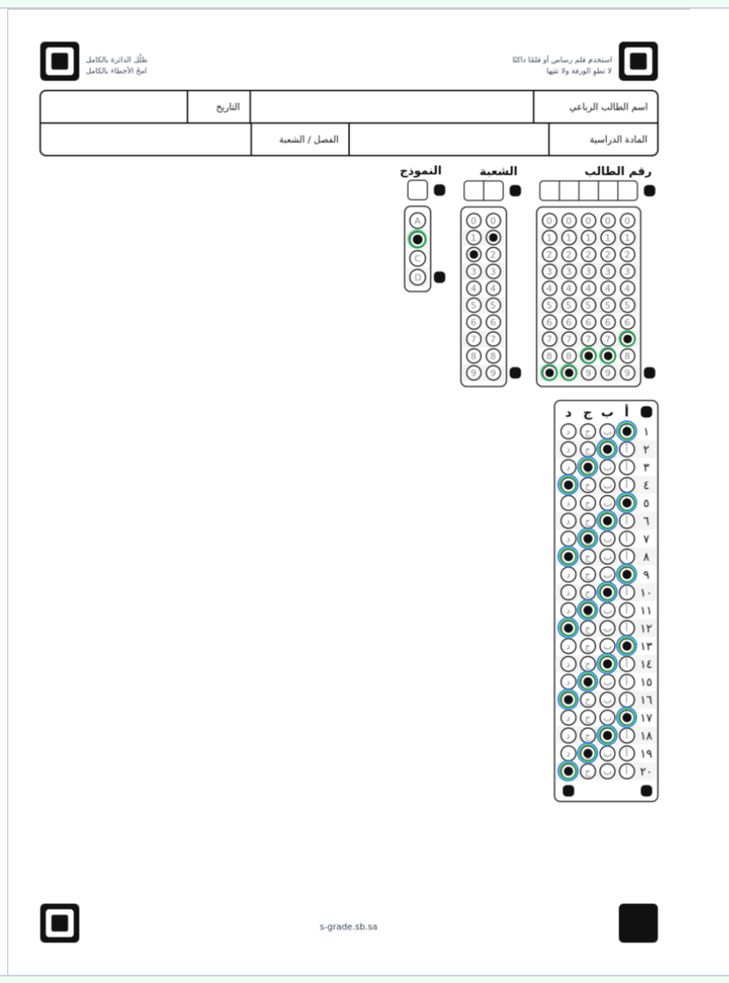
profile: `pristine` · 314 passed · 0 failed



INPUT



WARPED



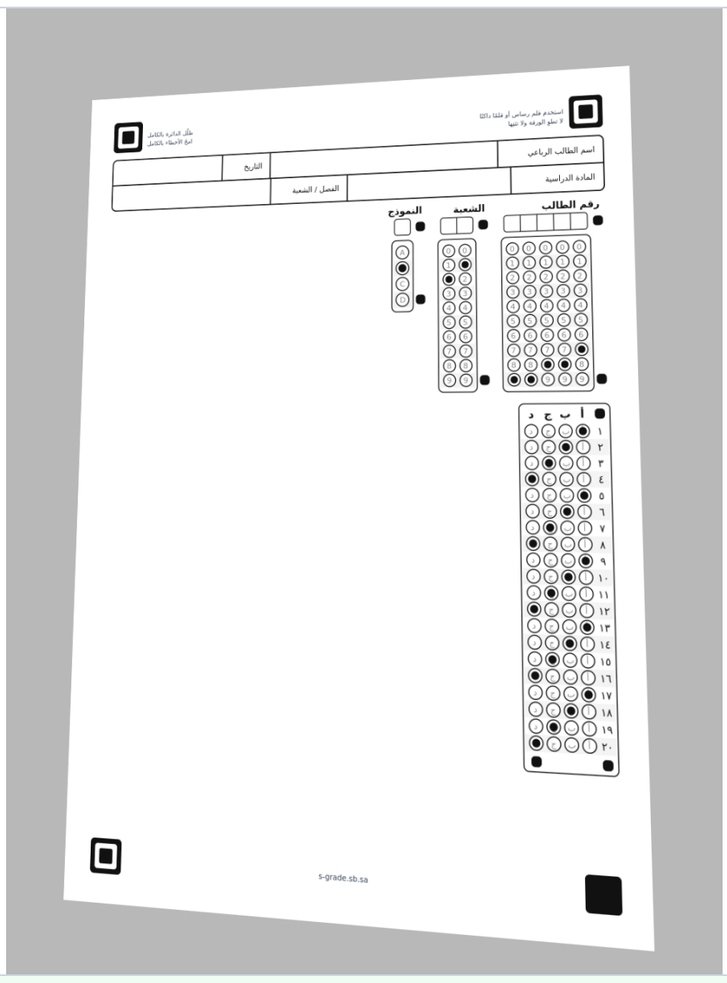
OVERLAY

field	expected	actual	
studentId	`99887`	`99887`	✓
form	`B`	`B`	✓
section	`21`	`21`	✓
score	`20`	`20`	✓

result.json

[AR] 20q · custom header fields · perspective mild PASS

profile: `perspective_mild` · 314 passed · 0 failed



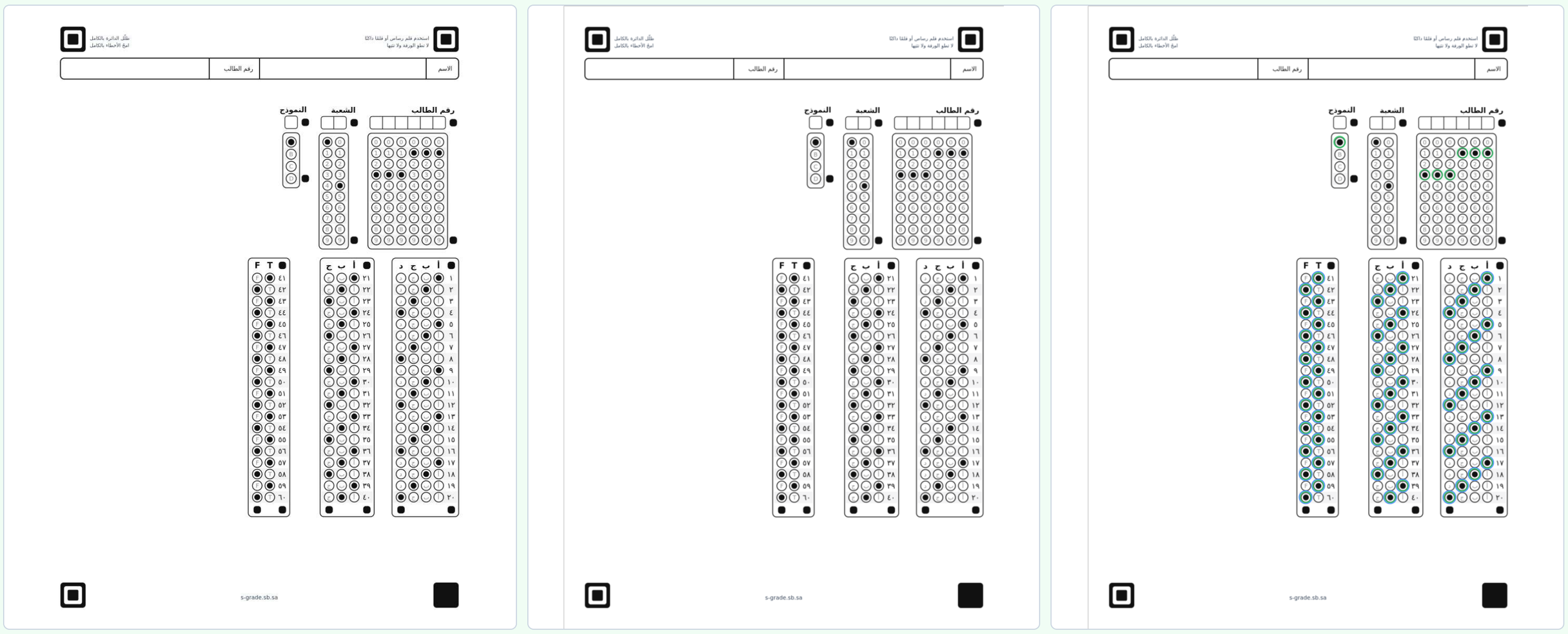
INPUT	WARPED	OVERLAY

field	expected	actual	
studentId	`99887`	`99887`	✓
form	`B`	`B`	✓
section	`21`	`21`	✓
score	`20`	`20`	✓

result.json

[AR] 60q · mixed groups large (A-D + A-C + T,F) · pristine PASS

profile: `pristine` · 534 passed · 0 failed



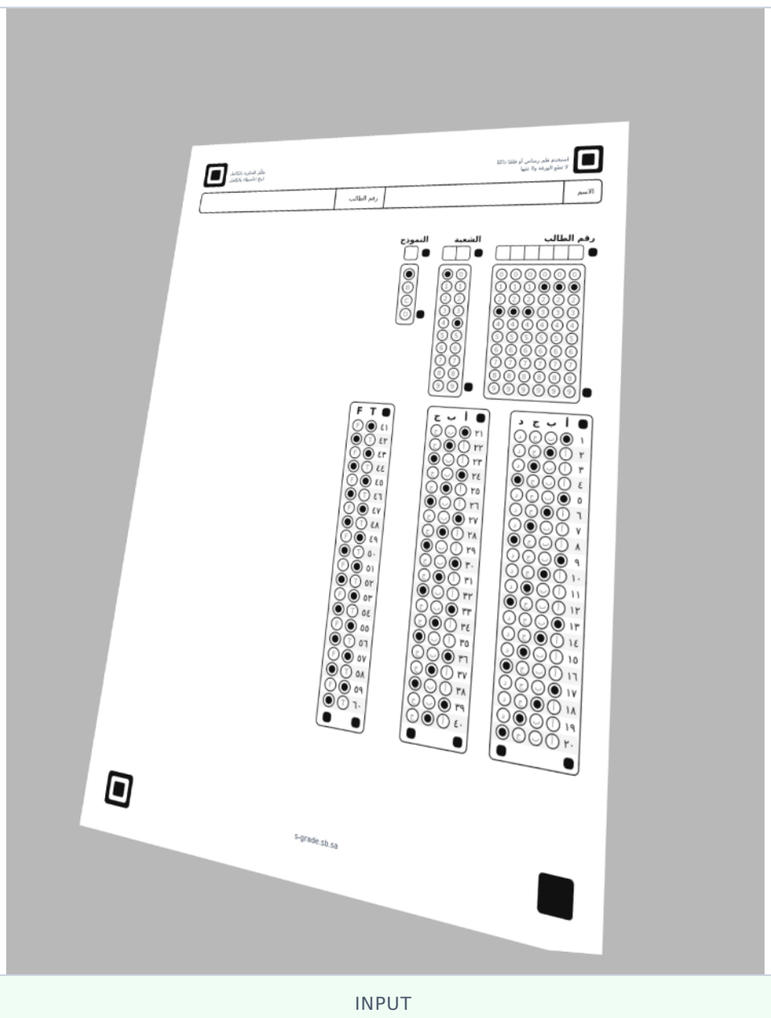
INPUT	WARPED	OVERLAY

field	expected	actual	
studentId	`333111`	`333111`	✓
form	`A`	`A`	✓
section	`04`	`04`	✓
score	`60`	`60`	✓

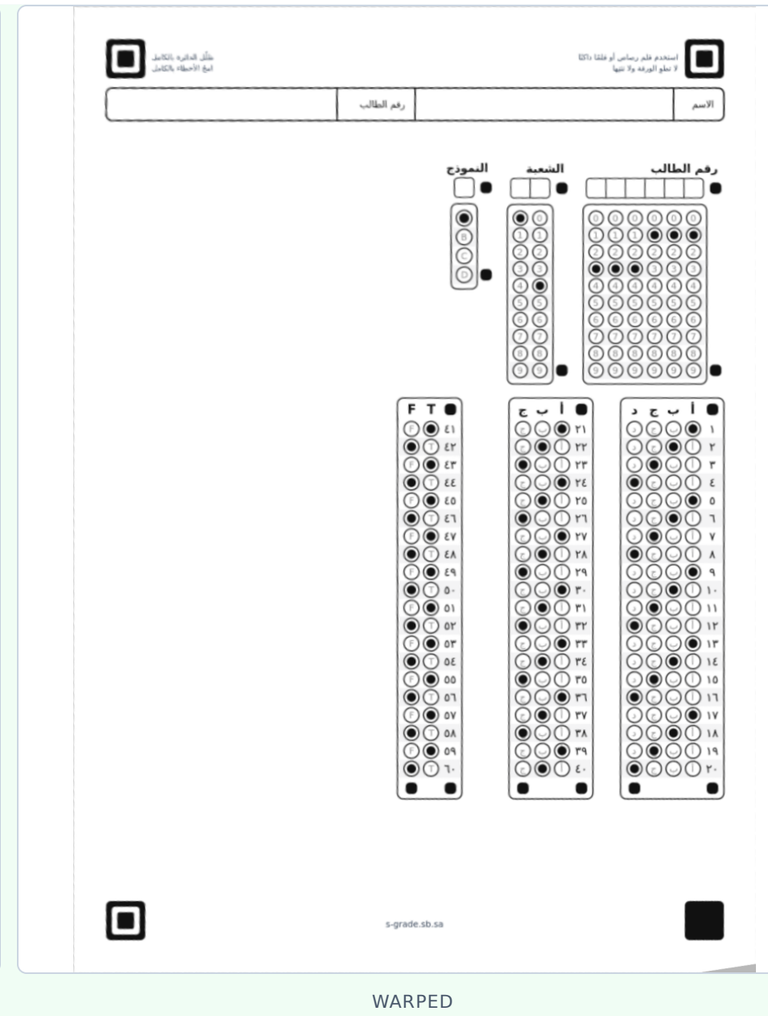
result.json

[AR] 60q · mixed groups large · tilt combined PASS

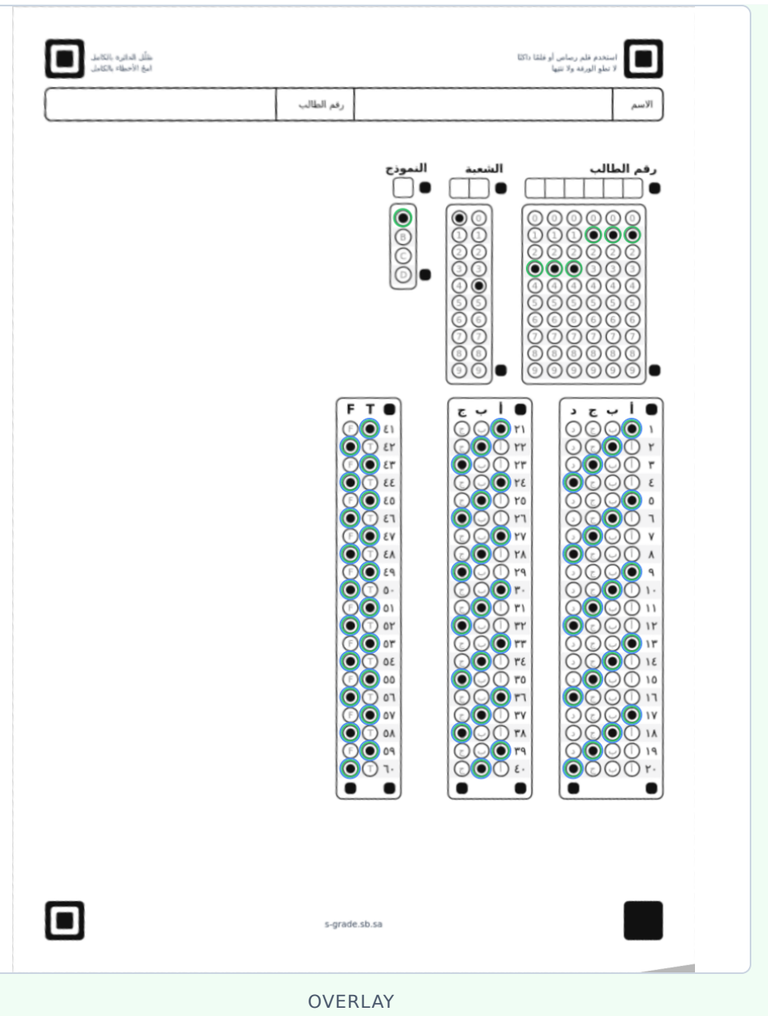
profile: `tilt_combined` · 534 passed · 0 failed



INPUT



WARPED



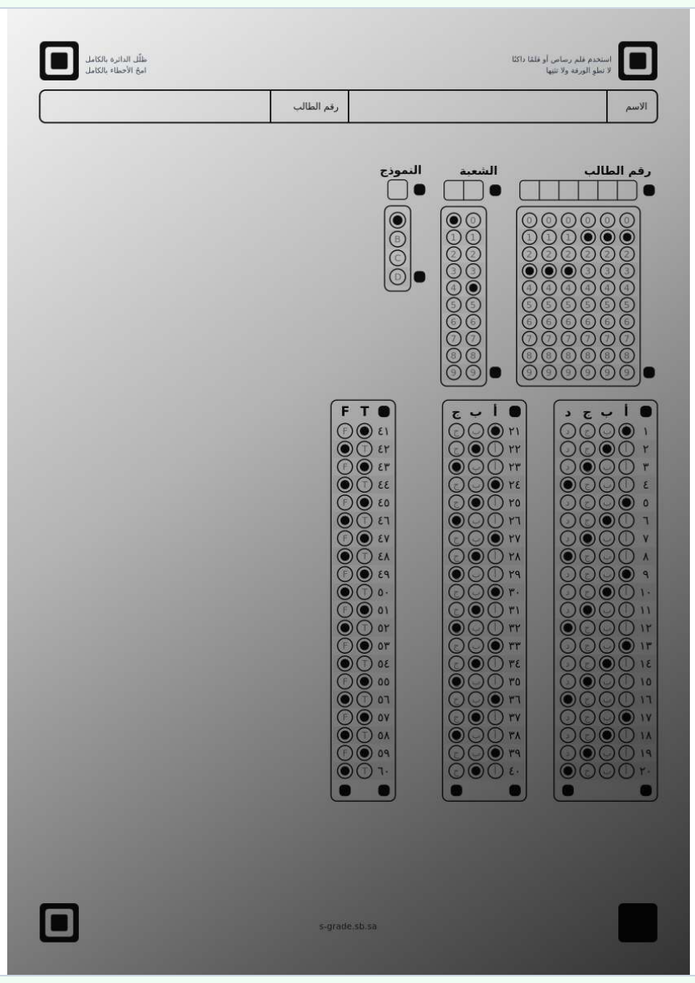
OVERLAY

field	expected	actual	
studentId	`333111`	`333111`	✓
form	`A`	`A`	✓
section	`04`	`04`	✓
score	`60`	`60`	✓

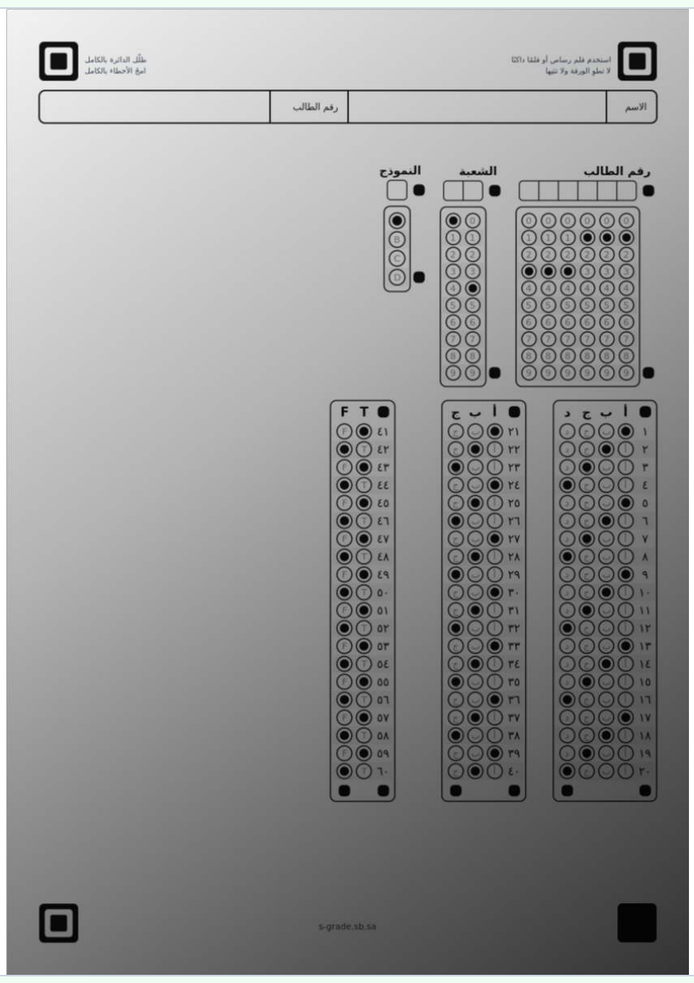
result.json

[AR] 60q · mixed groups large · lighting heavy gradient PASS

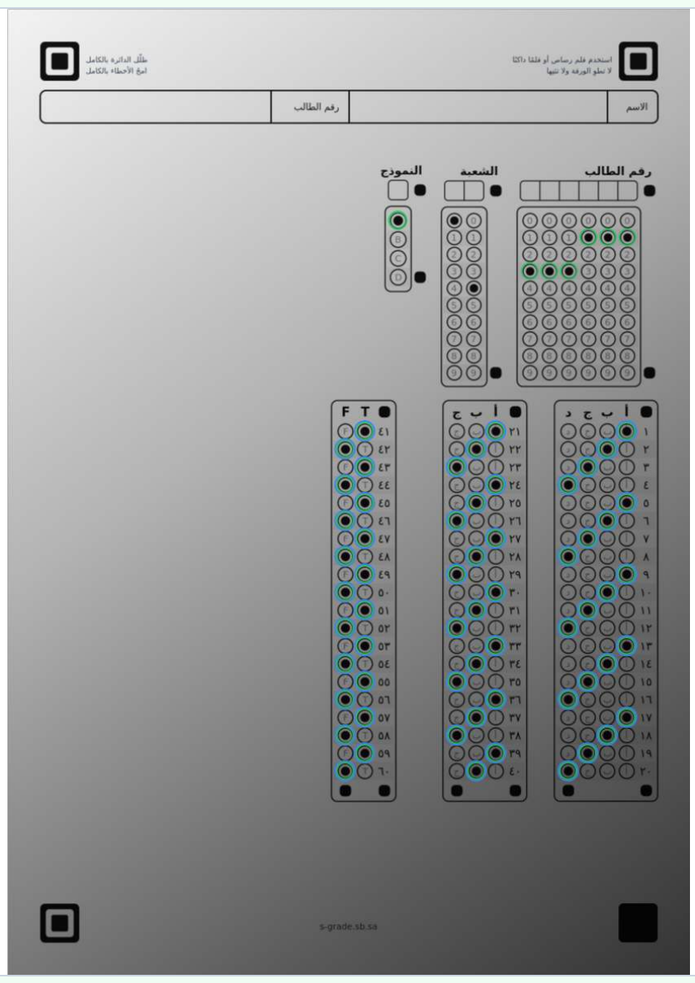
profile: `lighting_heavy_gradient` · 534 passed · 0 failed



INPUT



WARPED



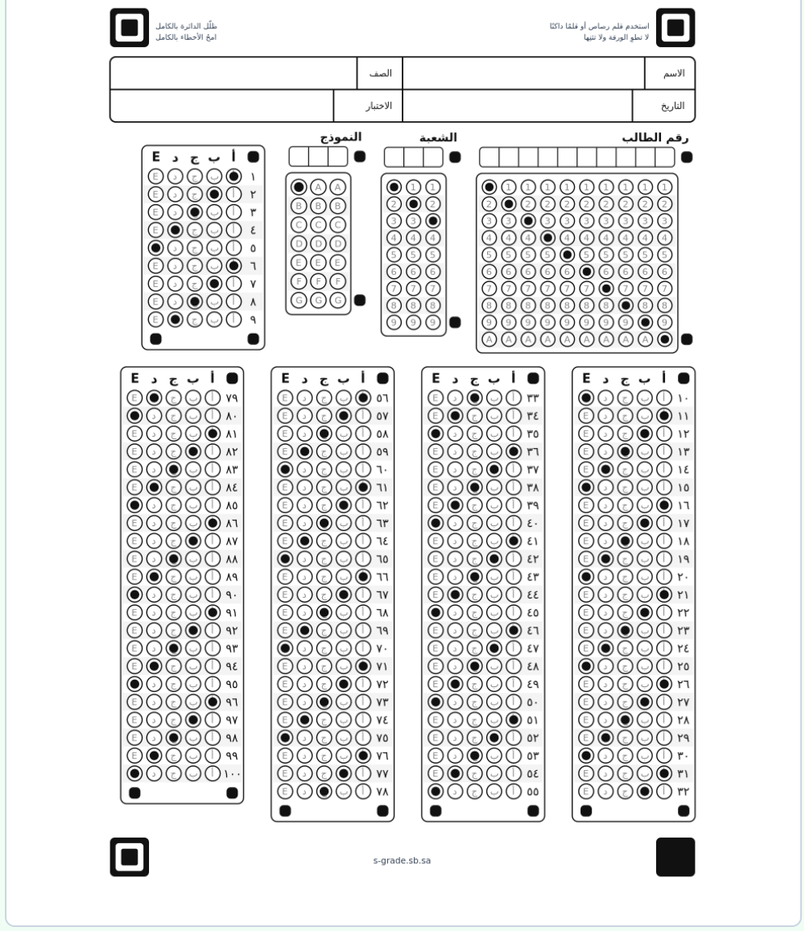
OVERLAY

field	expected	actual	
studentId	`333111`	`333111`	✓
form	`A`	`A`	✓
section	`04`	`04`	✓
score	`60`	`60`	✓

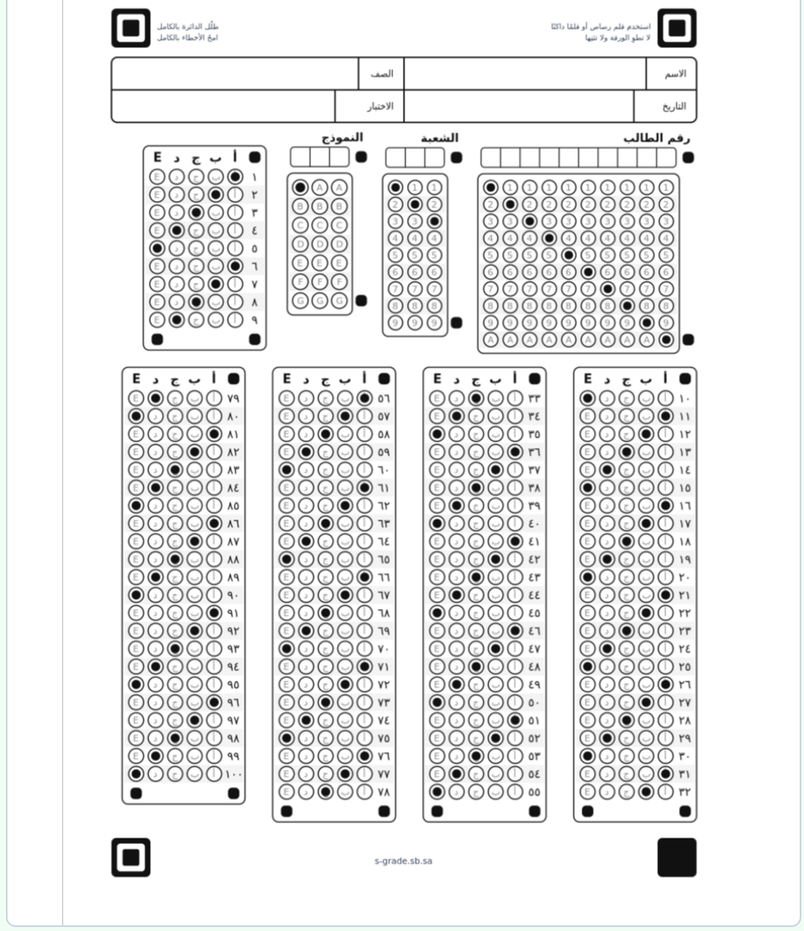
result.json

[AR] 100q · fully full (A-E, 3-col key A-G, 4 hdr) · pristine PASS

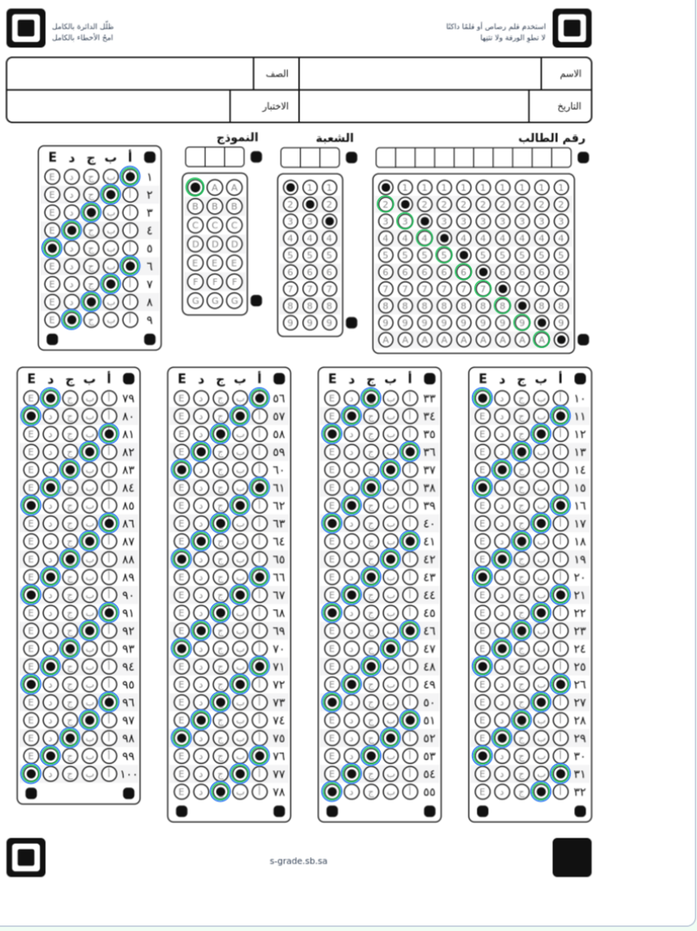
profile: `pristine` · 1302 passed · 0 failed



INPUT



WARPED



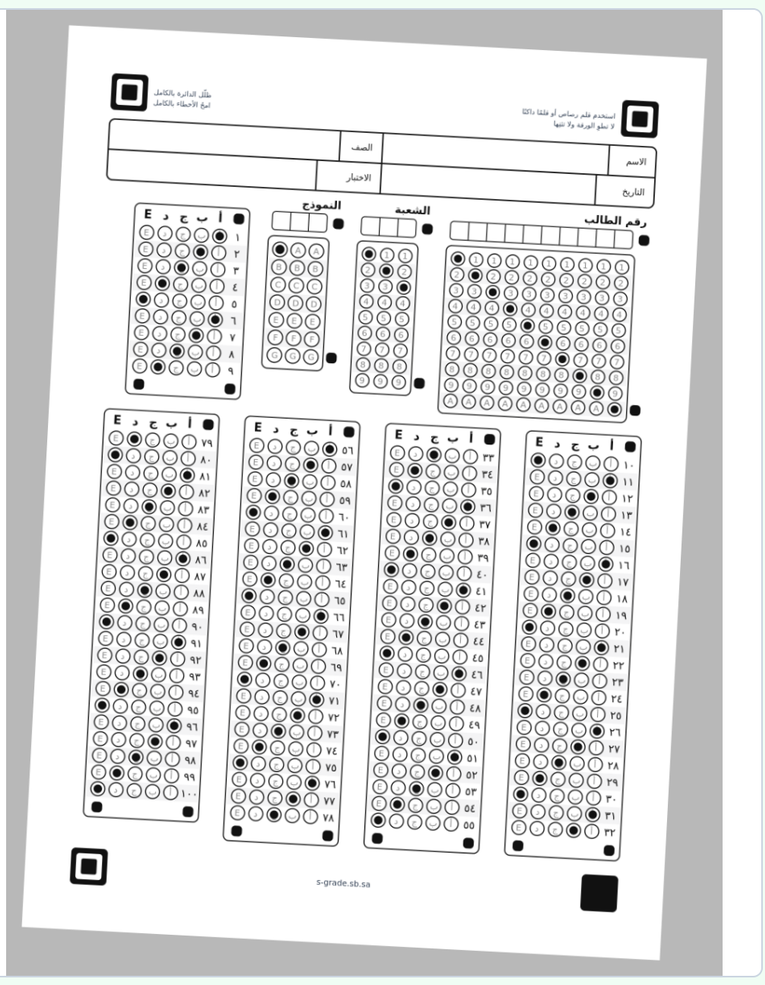
OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`A`	`A`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

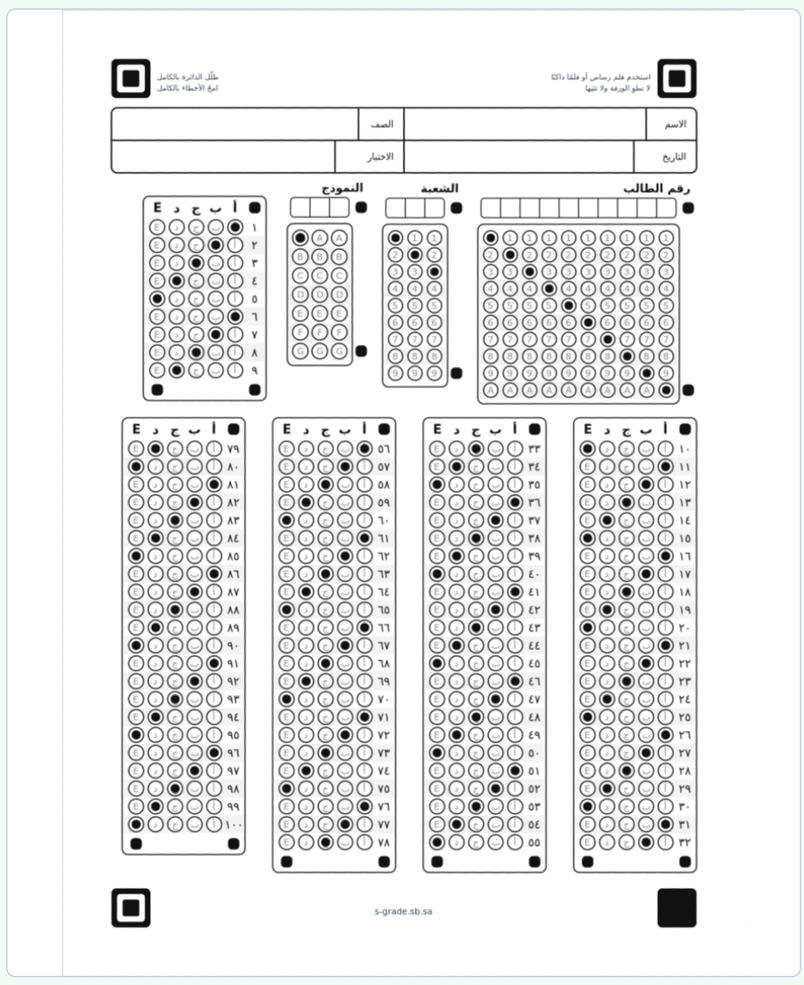
result.json

[AR] 100q · fully full · rotation 3deg PASS

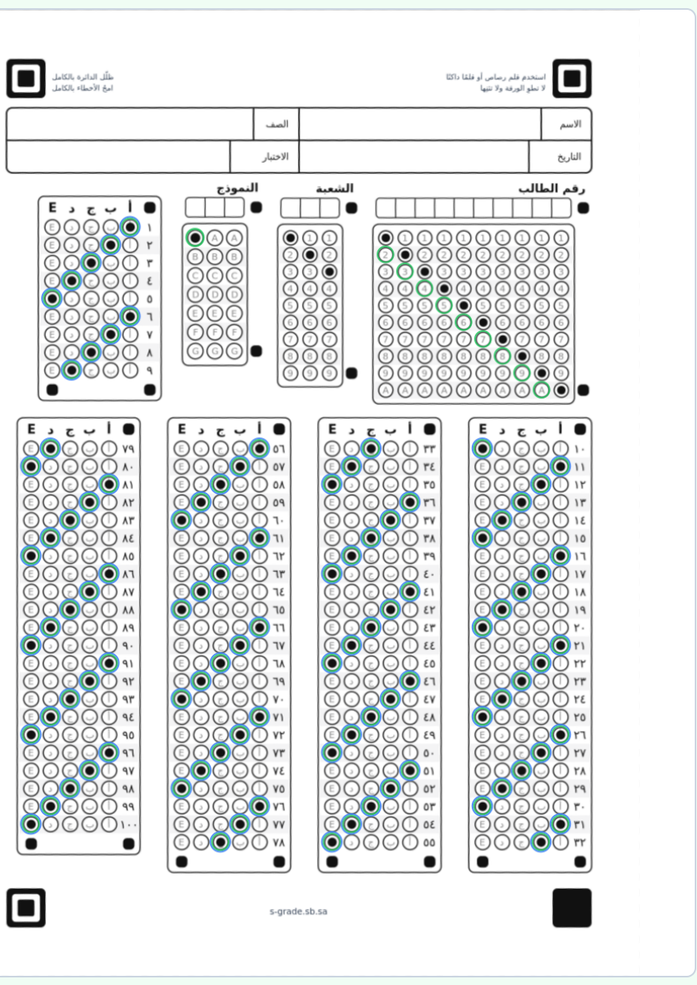
profile: `rotated_3deg` · 1302 passed · 0 failed



INPUT



WARPED



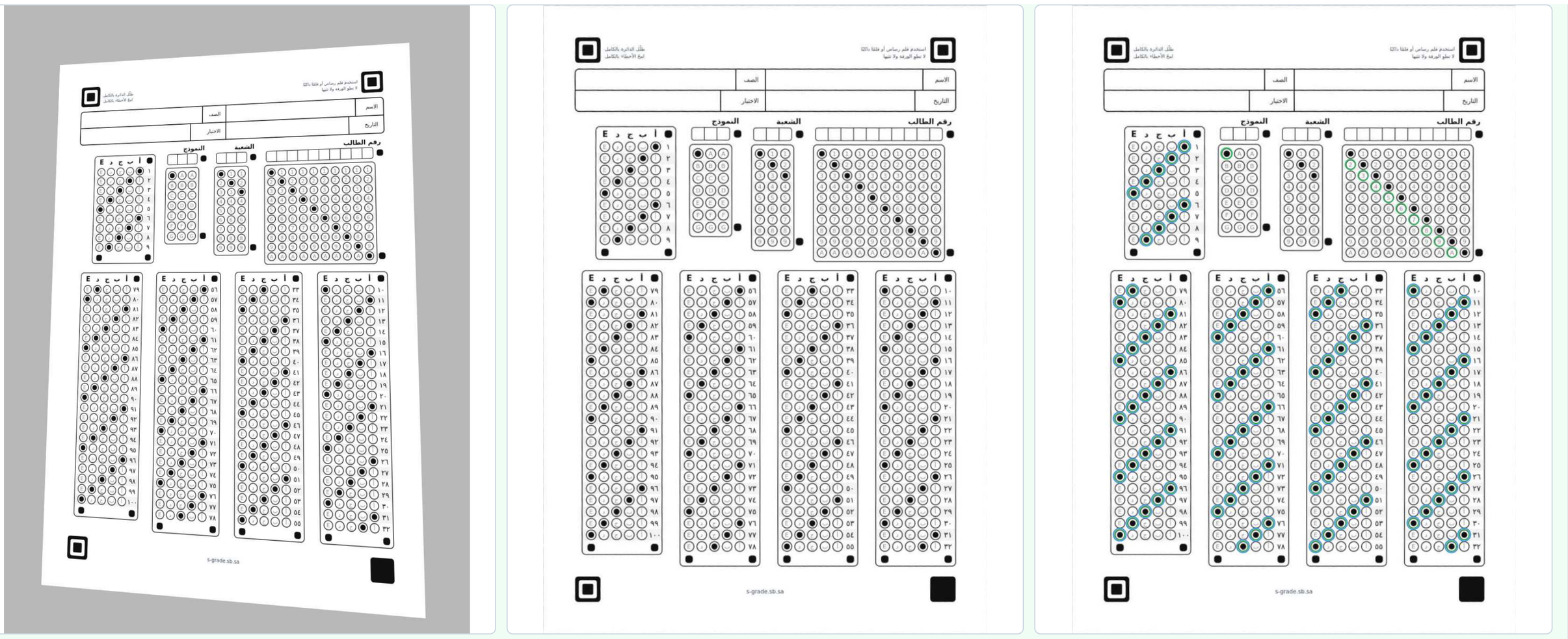
OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`A`	`A`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

result.json

[AR] 100q · fully full · perspective mild + jpeg q50 PASS

profile: `perspective_mild → jpeg_q50` · 1302 passed · 0 failed



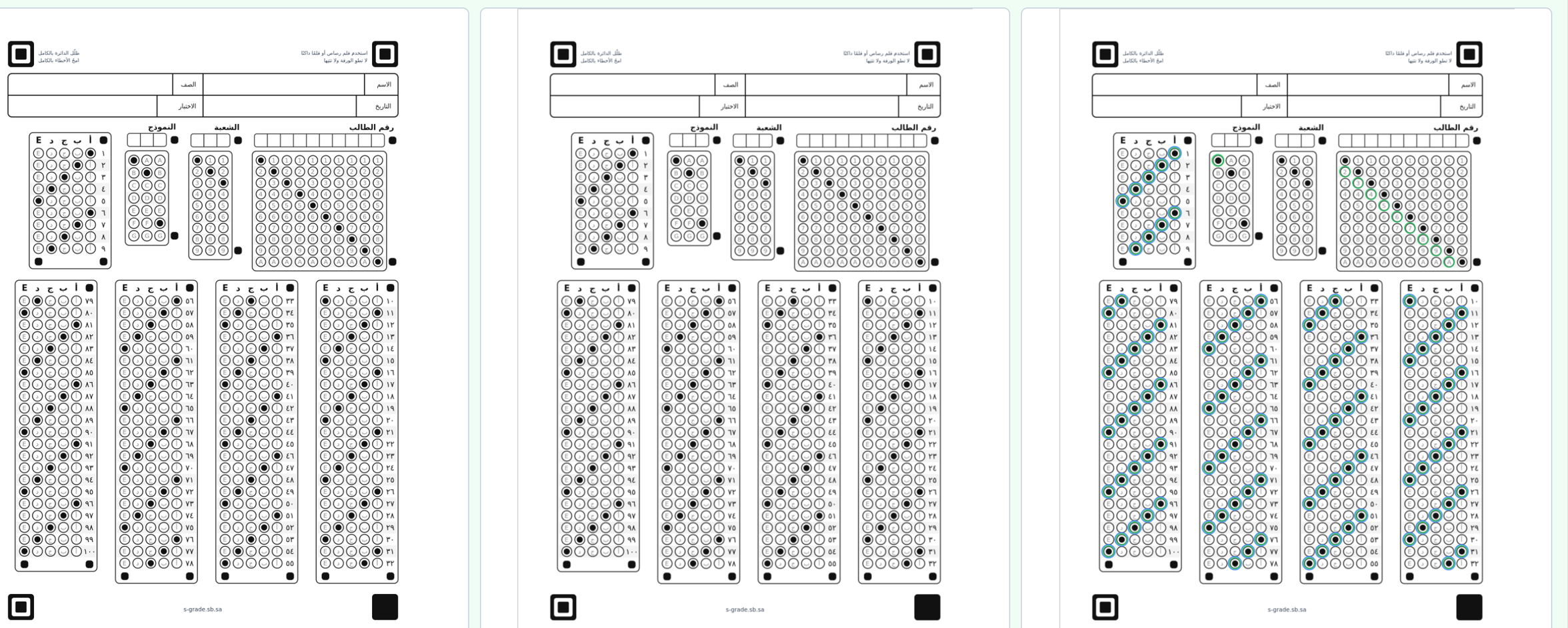
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`A`	`A`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

result.json

[AR] 100q · fully full · multi-char form "ABF" · pristine PASS

profile: `pristine` · 1302 passed · 0 failed



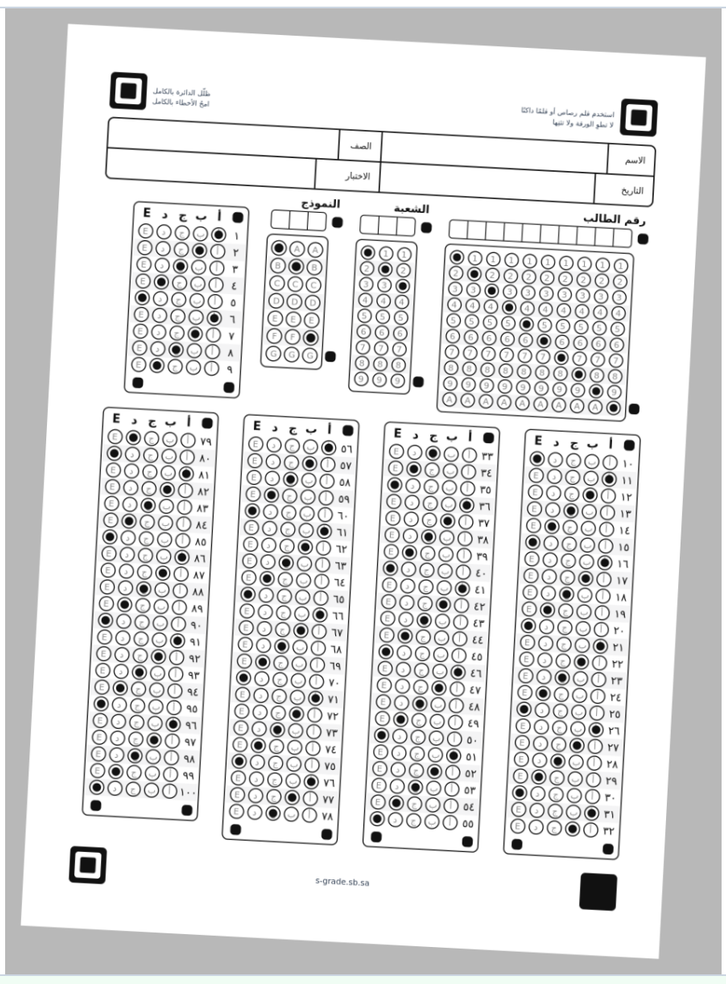
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`ABF`	`ABF`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

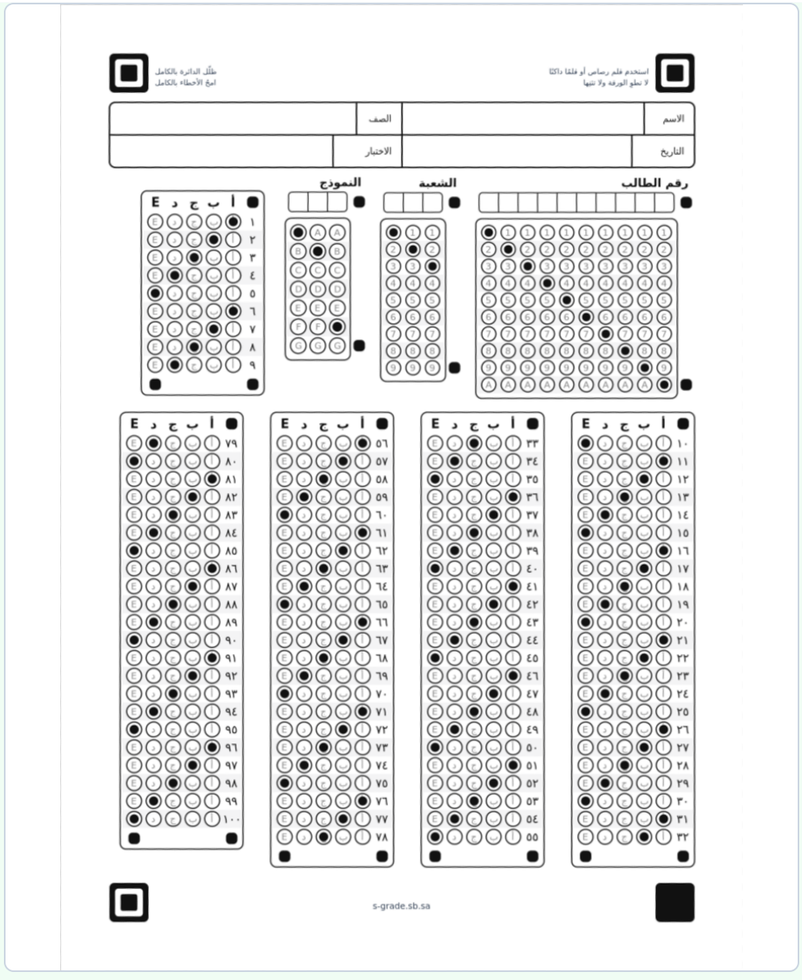
result.json

[AR] 100q · fully full · multi-char form "ABF" · rotation 3deg PASS

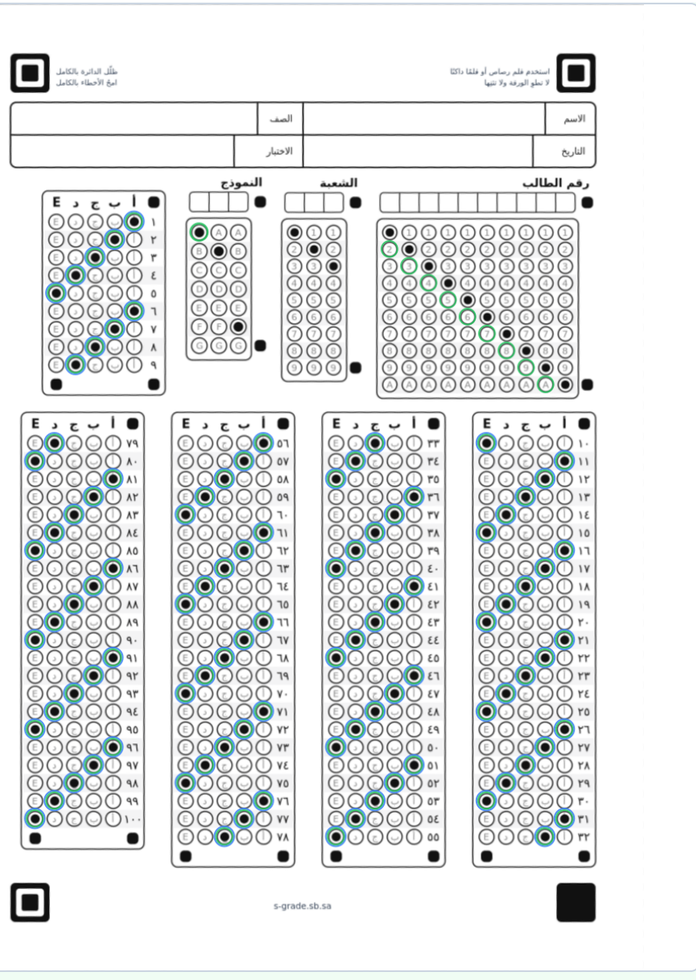
profile: `rotated_3deg` · 1302 passed · 0 failed



INPUT



WARPED



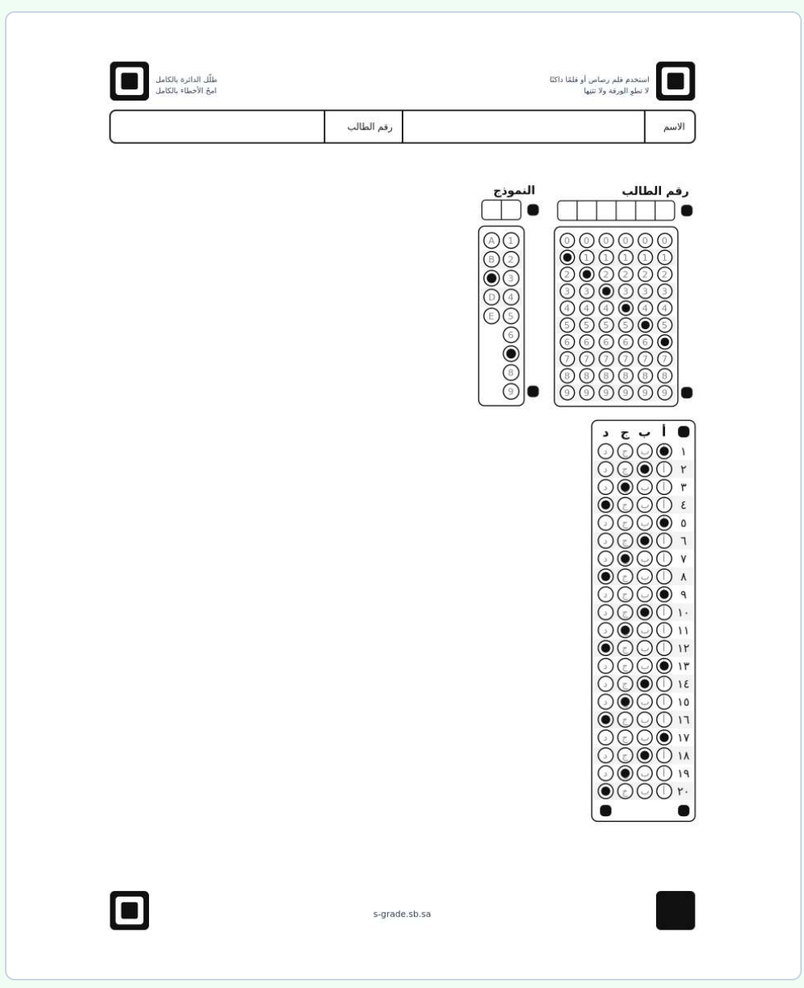
OVERLAY

field	expected	actual	
studentId	`123456789A`	`123456789A`	✓
form	`ABF`	`ABF`	✓
section	`123`	`123`	✓
score	`100`	`100`	✓

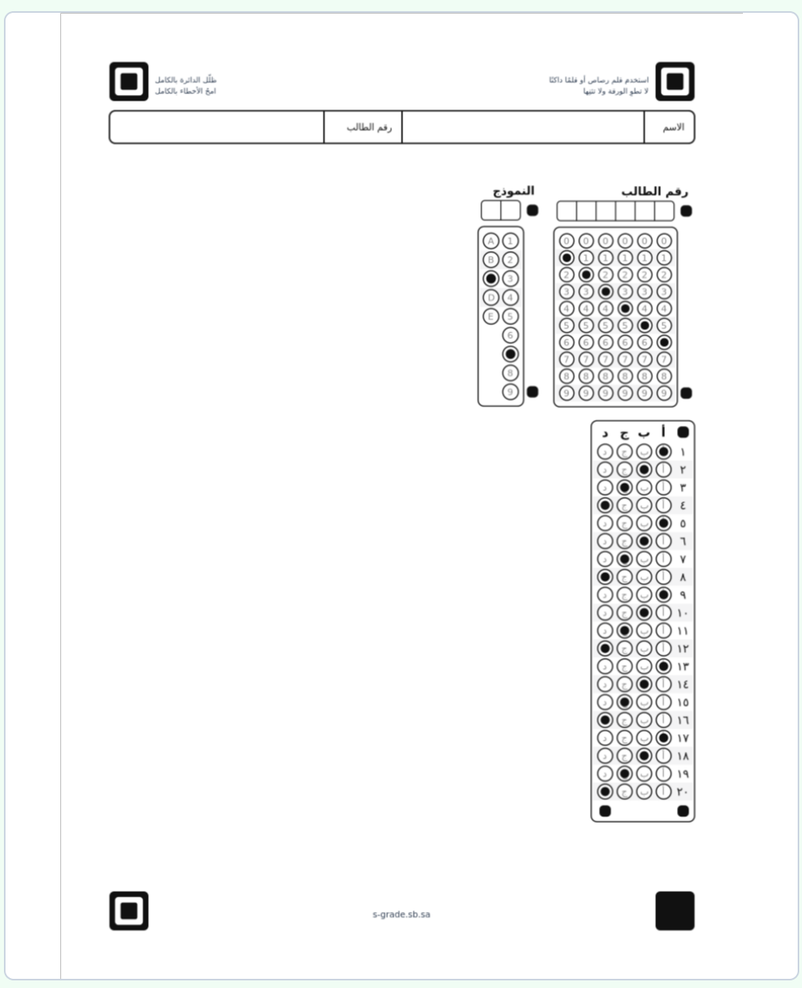
result.json

[AR] 20q · per-column form scheme · form "C7" of 40 · pristine PASS

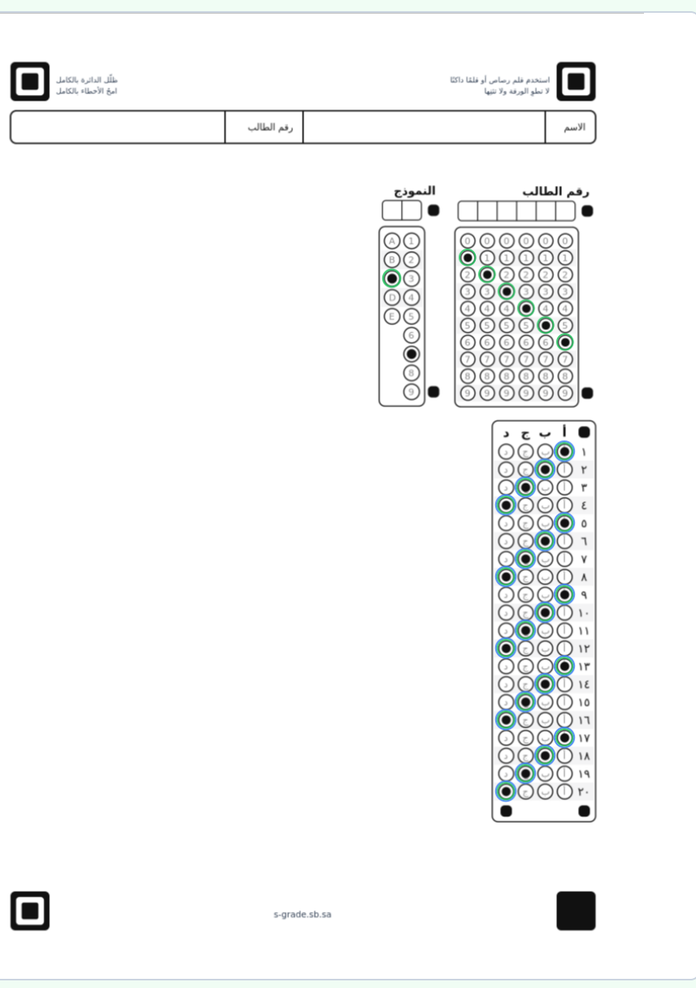
profile: `pristine` · 313 passed · 0 failed



INPUT



WARPED



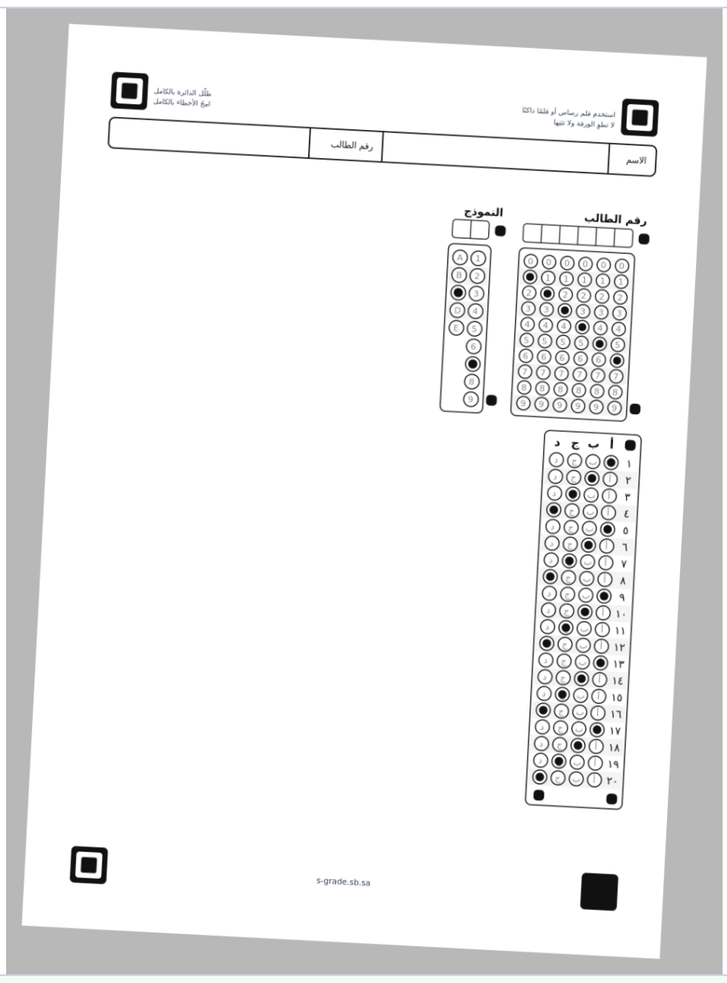
OVERLAY

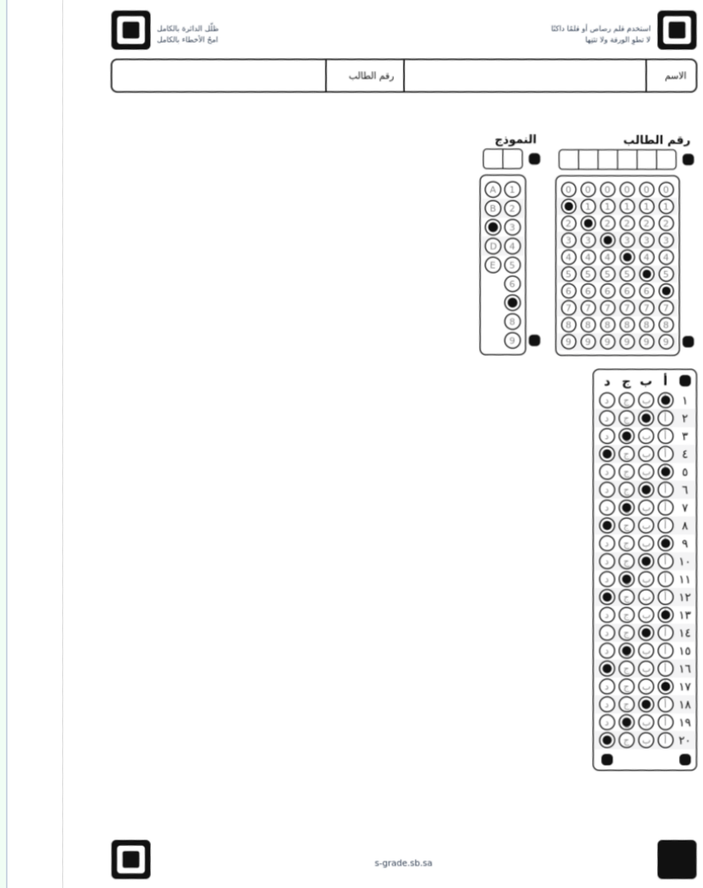
field	expected	actual	
studentId	`123456`	`123456`	✓
form	`C7`	`C7`	✓
score	`20`	`20`	✓

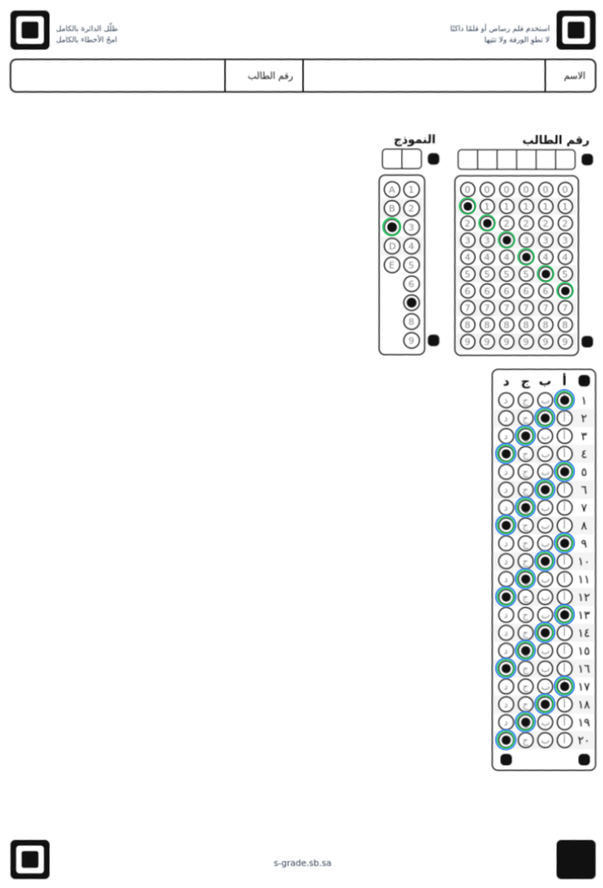
result.json

[AR] 20q · per-column form scheme · form "C7" of 40 · rotation 3deg PASS

profile: `rotated_3deg` · 313 passed · 0 failed







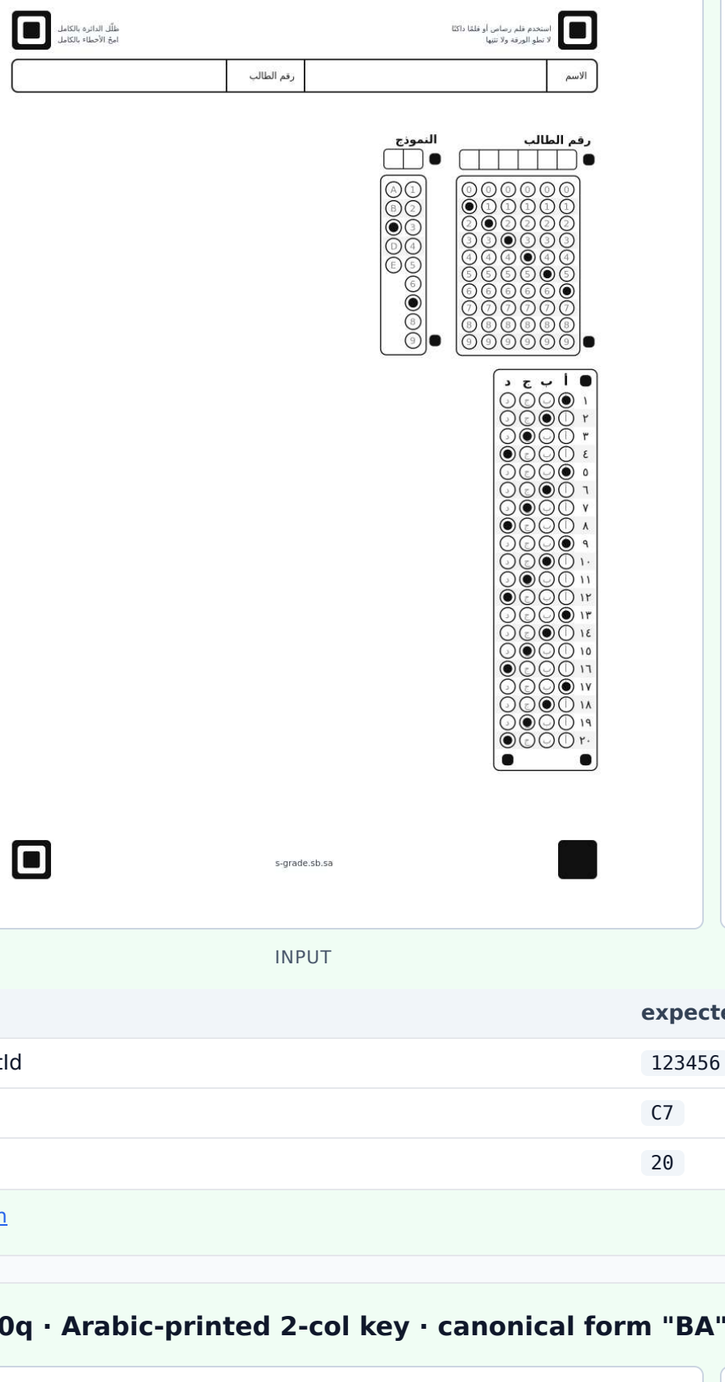
INPUT WARPED OVERLAY

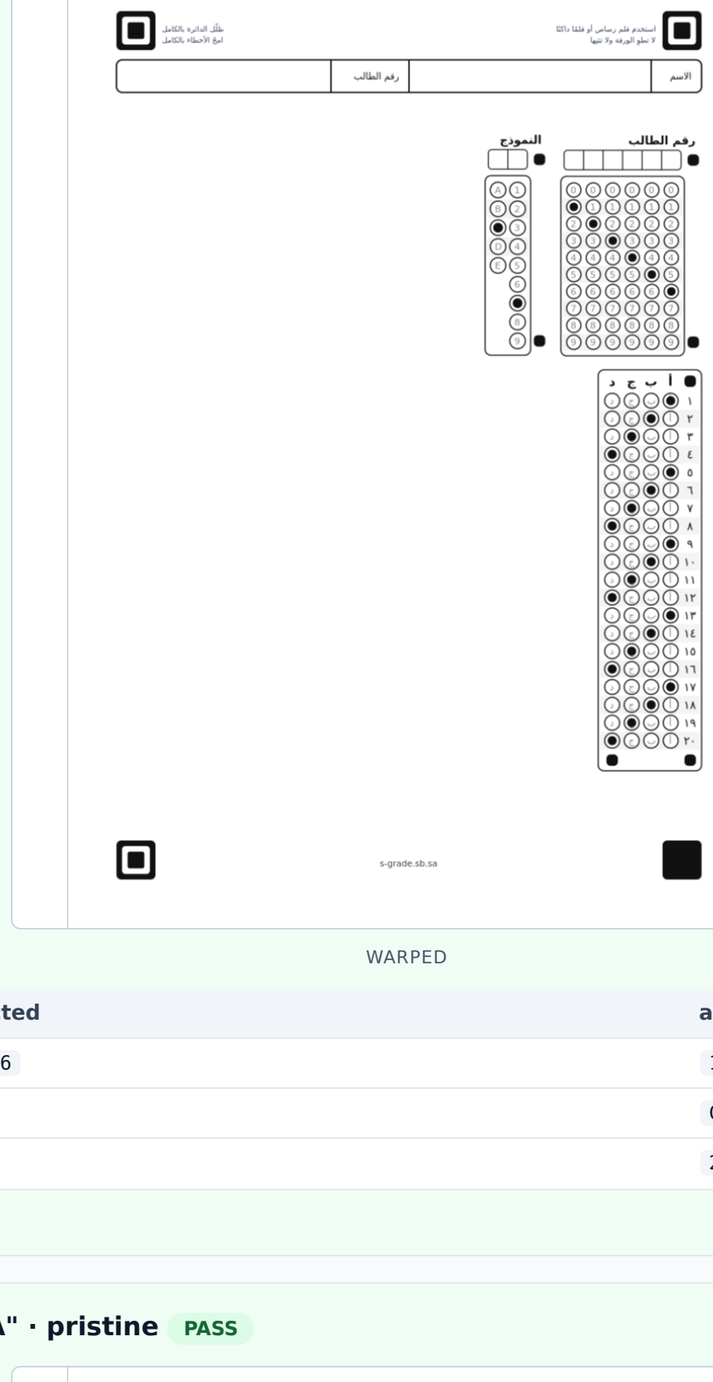
field	expected	actual	
studentId	`123456`	`123456`	✓
form	`C7`	`C7`	✓
score	`20`	`20`	✓

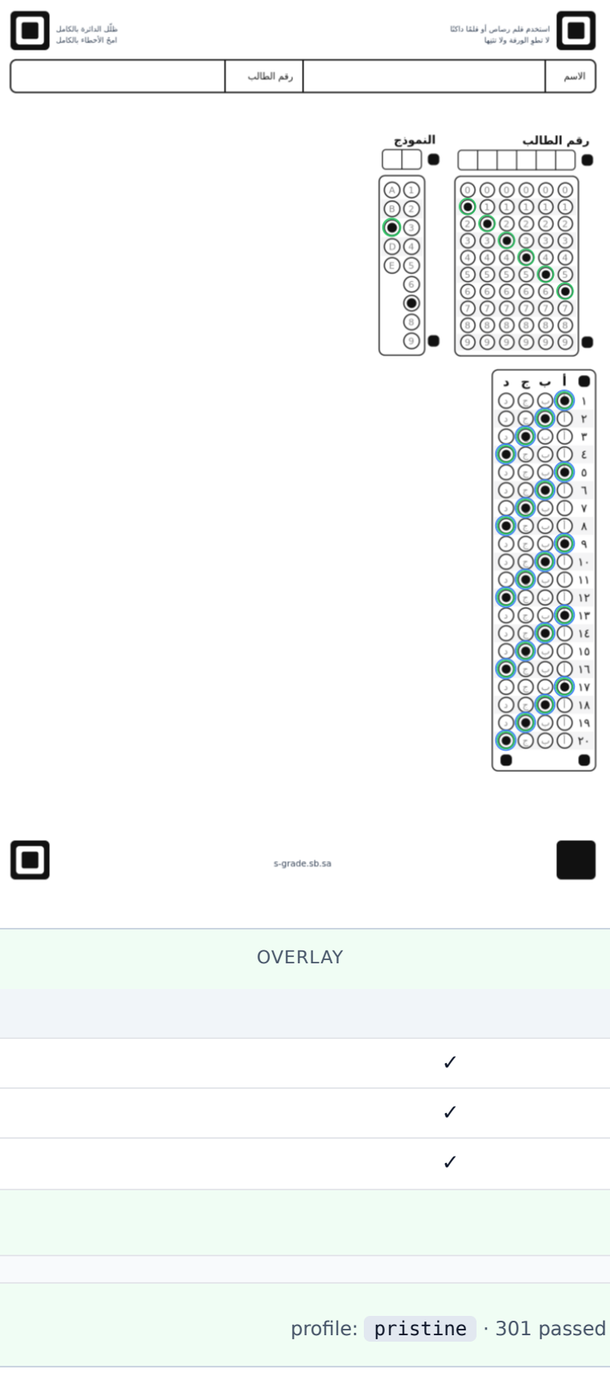
result.json

[AR] 20q · per-column form scheme · one-per-column is not multi-fill PASS

profile: `pristine` · 314 passed · 0 failed







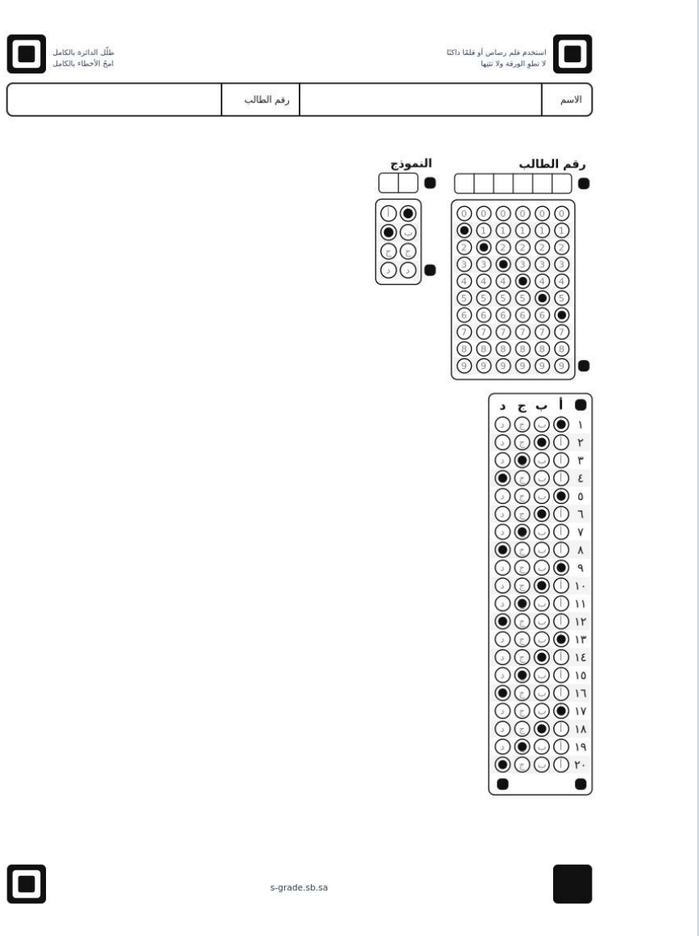
INPUT WARPED OVERLAY

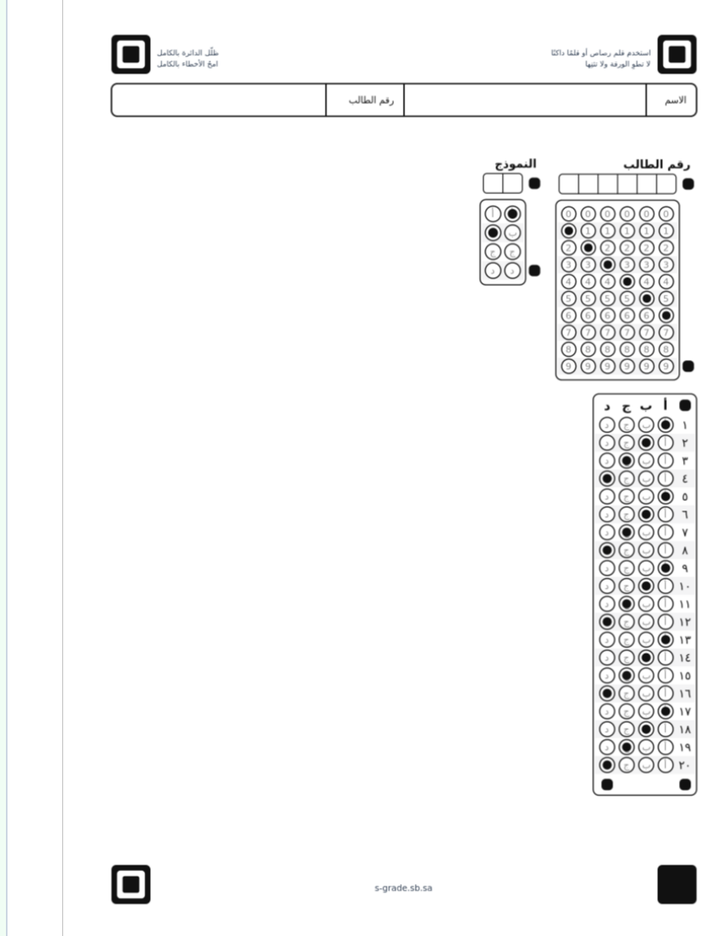
field	expected	actual	
studentId	`123456`	`123456`	✓
form	`C7`	`C7`	✓
score	`20`	`20`	✓

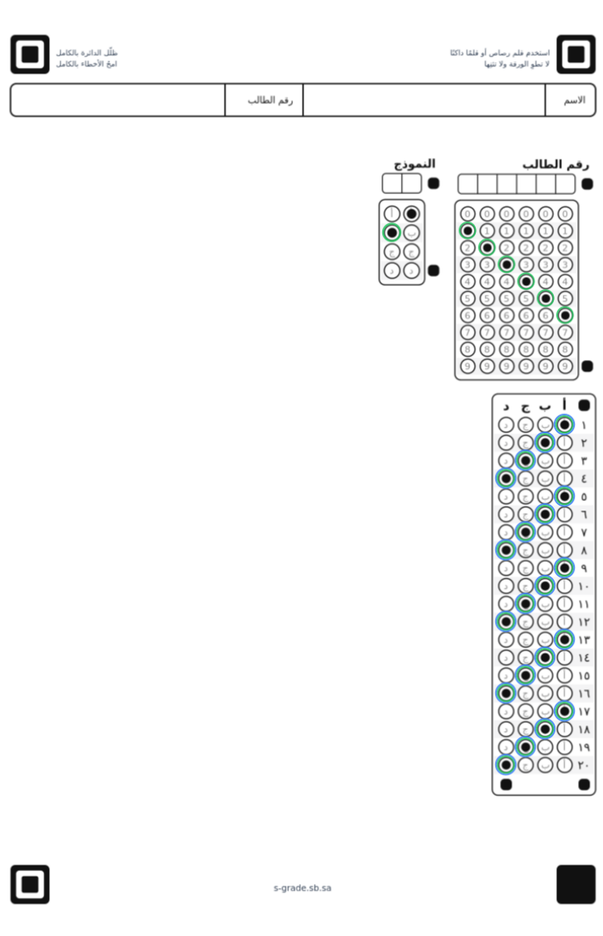
result.json

[AR] 20q · Arabic-printed 2-col key · canonical form "BA" · pristine PASS

profile: `pristine` · 301 passed · 0 failed







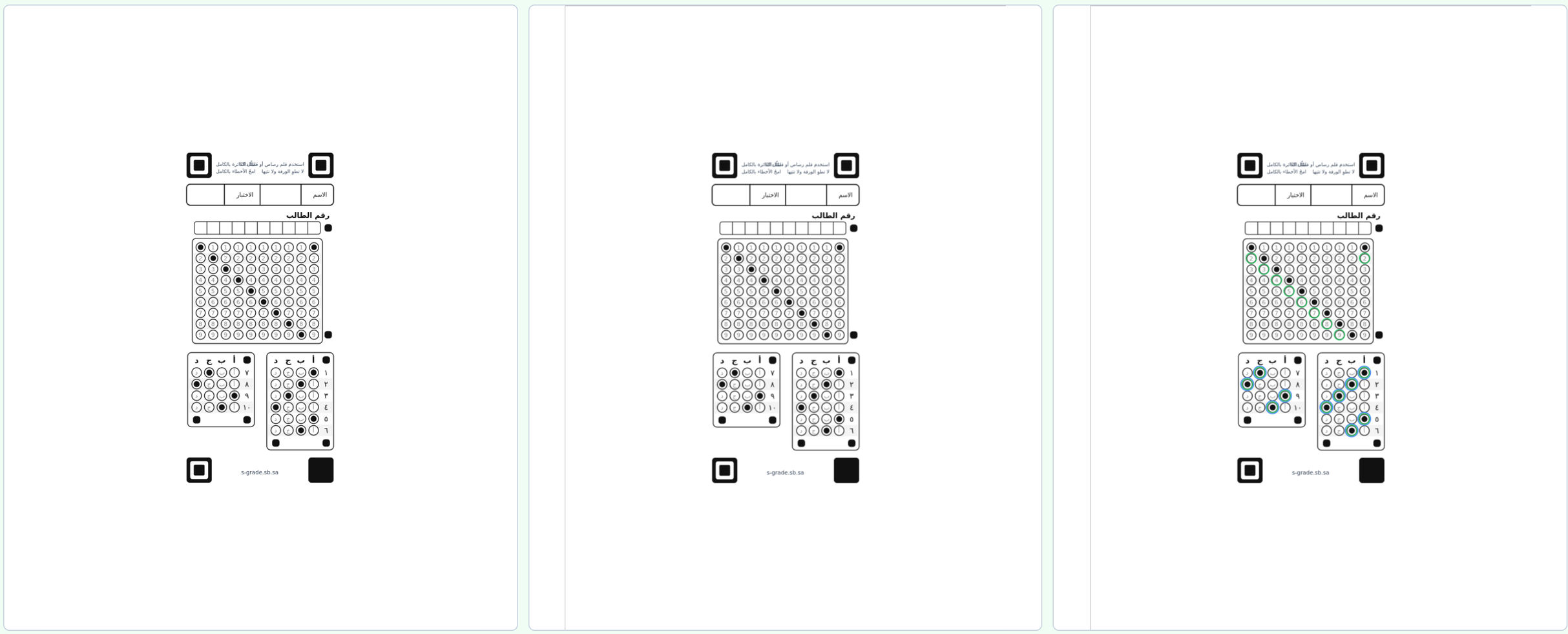
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`123456`	`123456`	✓
form	`BA`	`BA`	✓
score	`20`	`20`	✓

result.json

[AR] 10q · smaaaall (margin 70, no section/key) · pristine PASS

profile: `pristine` · 265 passed · 0 failed



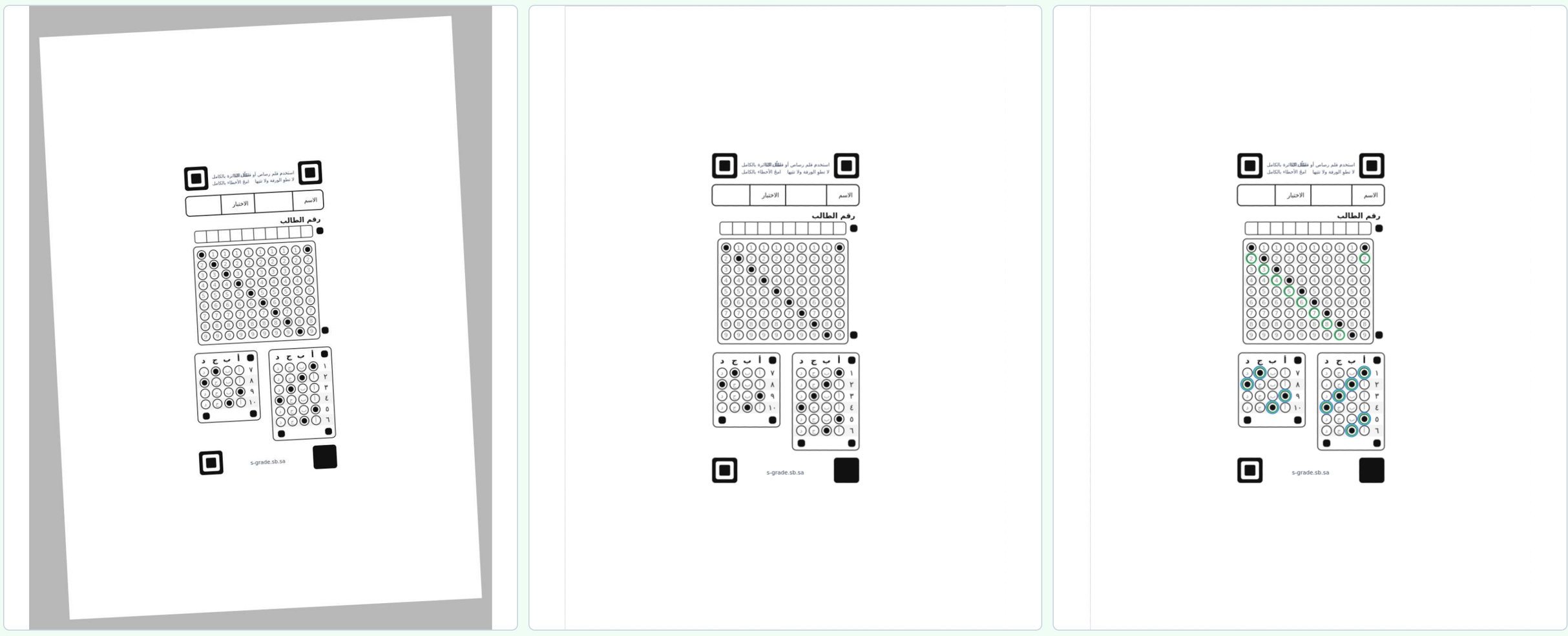
INPUT WARPED OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
score	`10`	`10`	✓

result.json

[AR] 10q · smaaaall · rotation -3deg PASS

profile: `rotated_neg3deg` · 265 passed · 0 failed



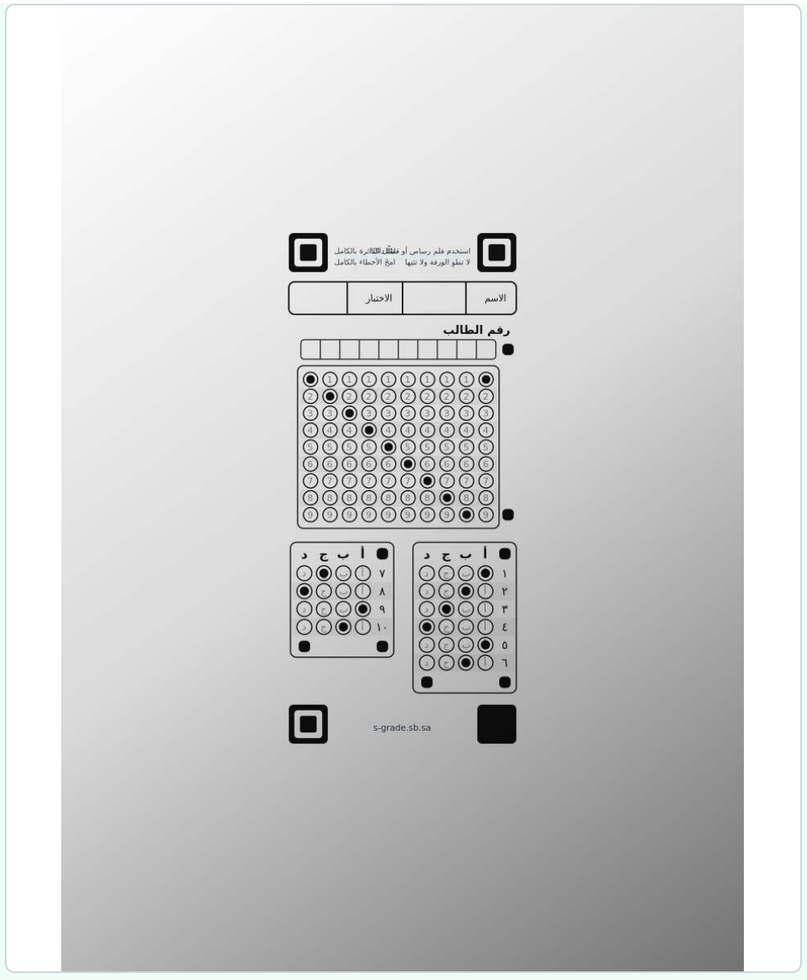
INPUT WARPED OVERLAY

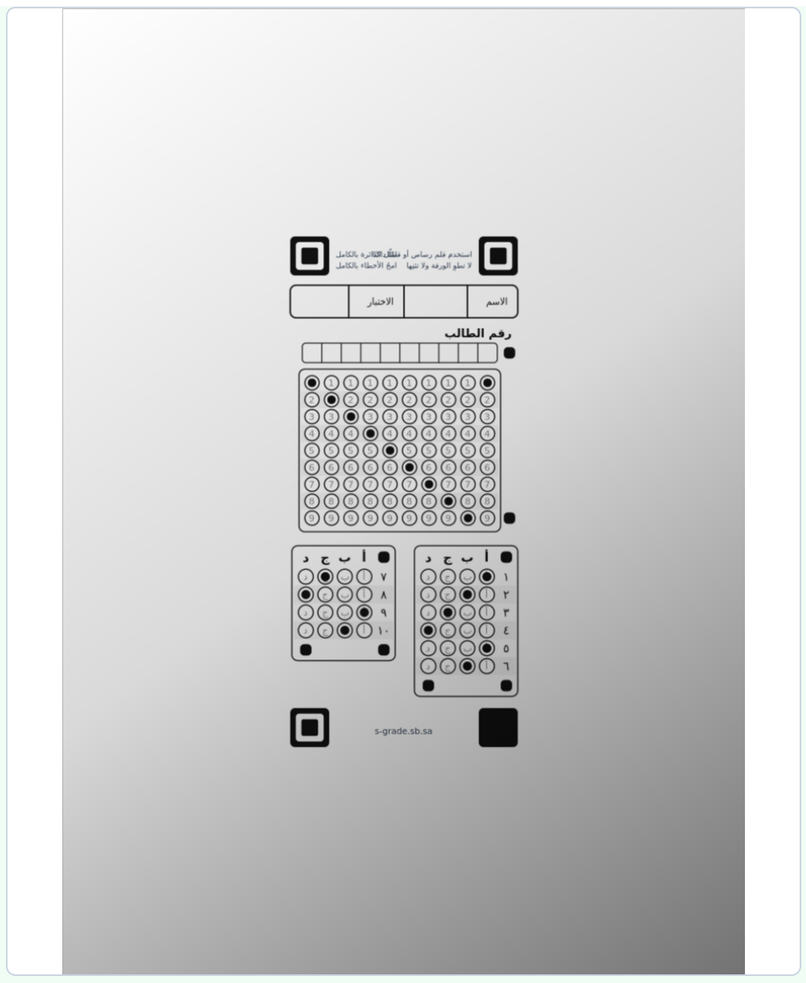
field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
score	`10`	`10`	✓

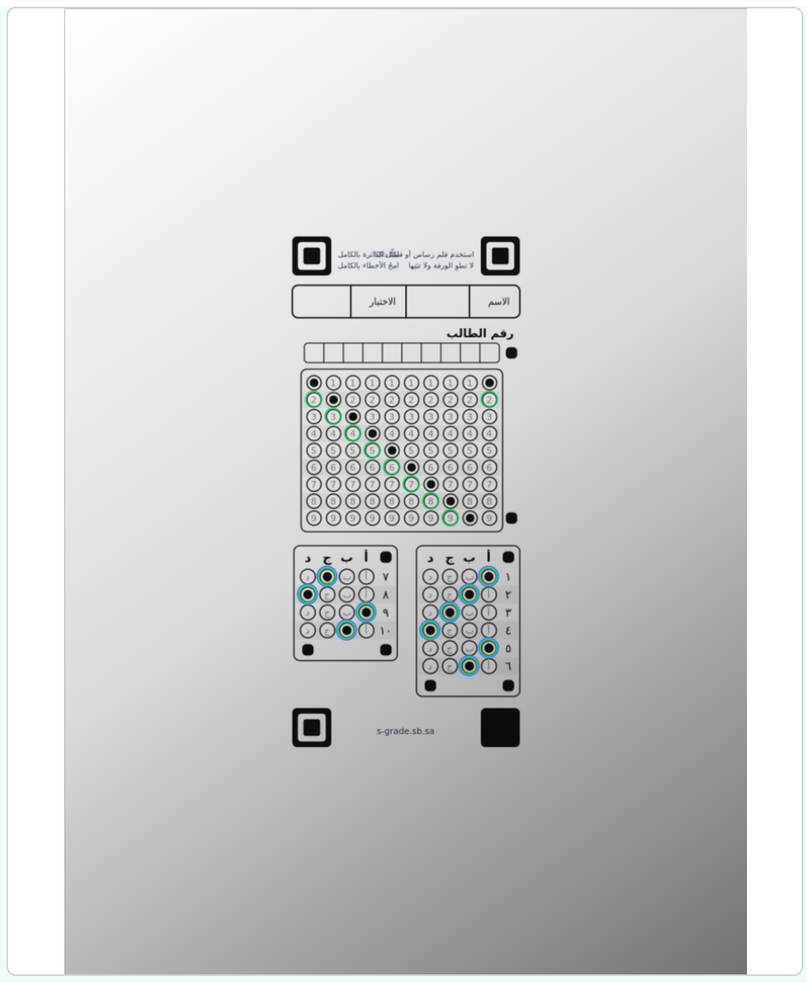
result.json

[AR] 10q · smaaaall · lighting gradient PASS

profile: `lighting_gradient` · 265 passed · 0 failed







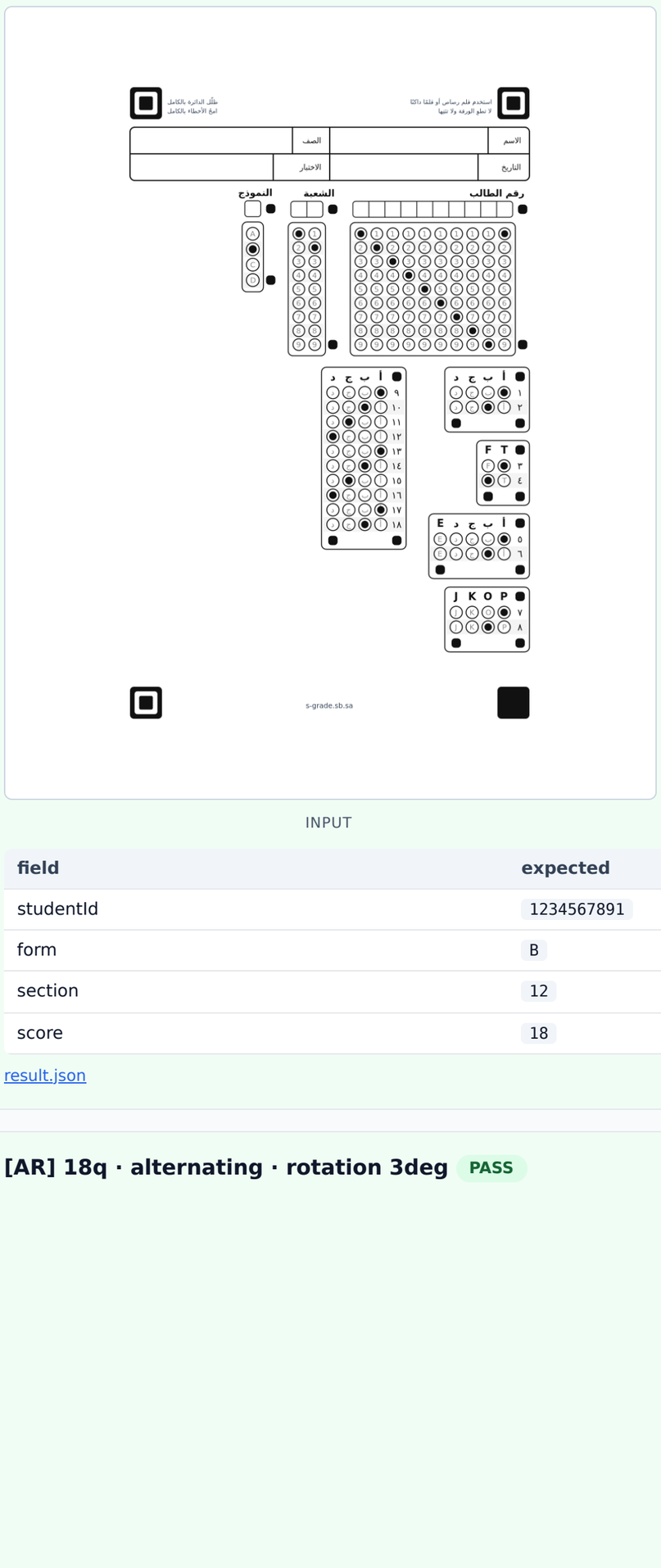
INPUT | WARPED | OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
score	`10`	`10`	✓

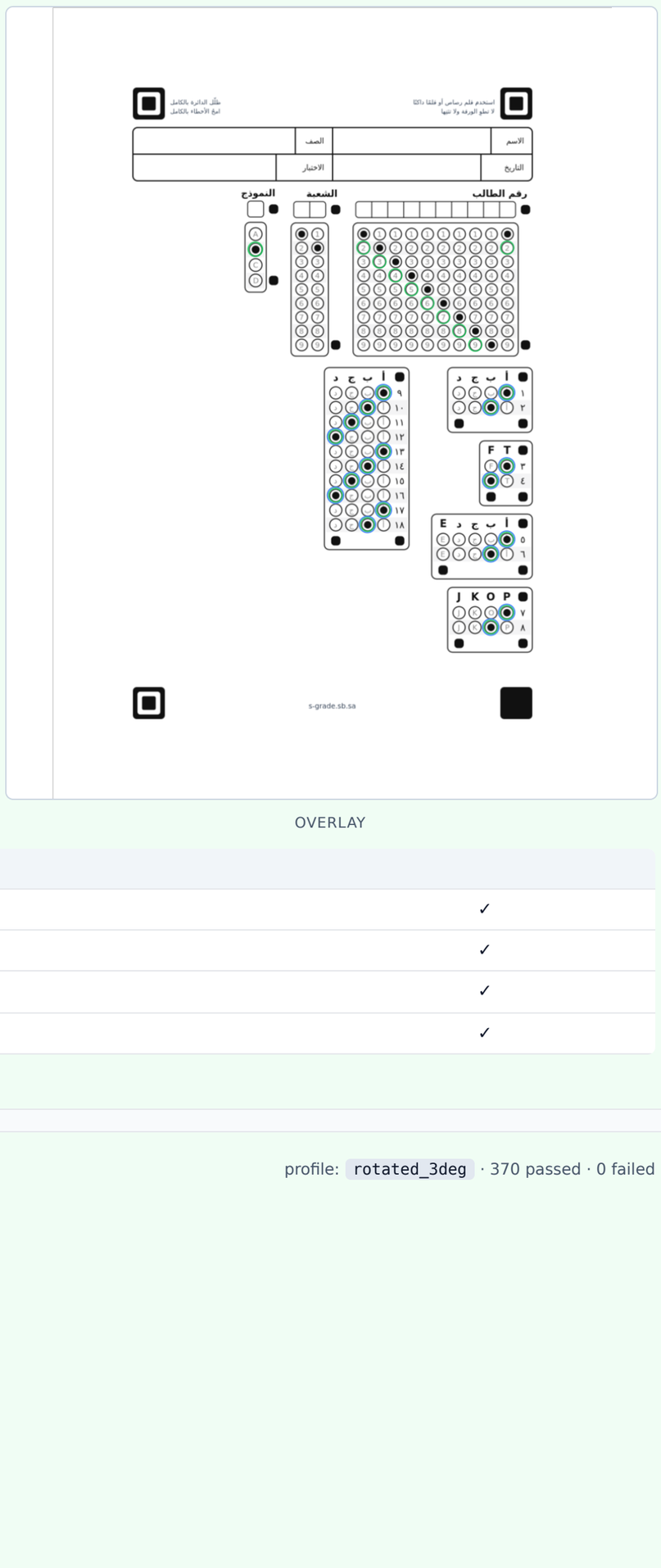
result.json

[AR] 18q · alternating (A-D/T-F/A-E/POKJ/A-D) · pristine PASS

profile: `pristine` · 370 passed · 0 failed







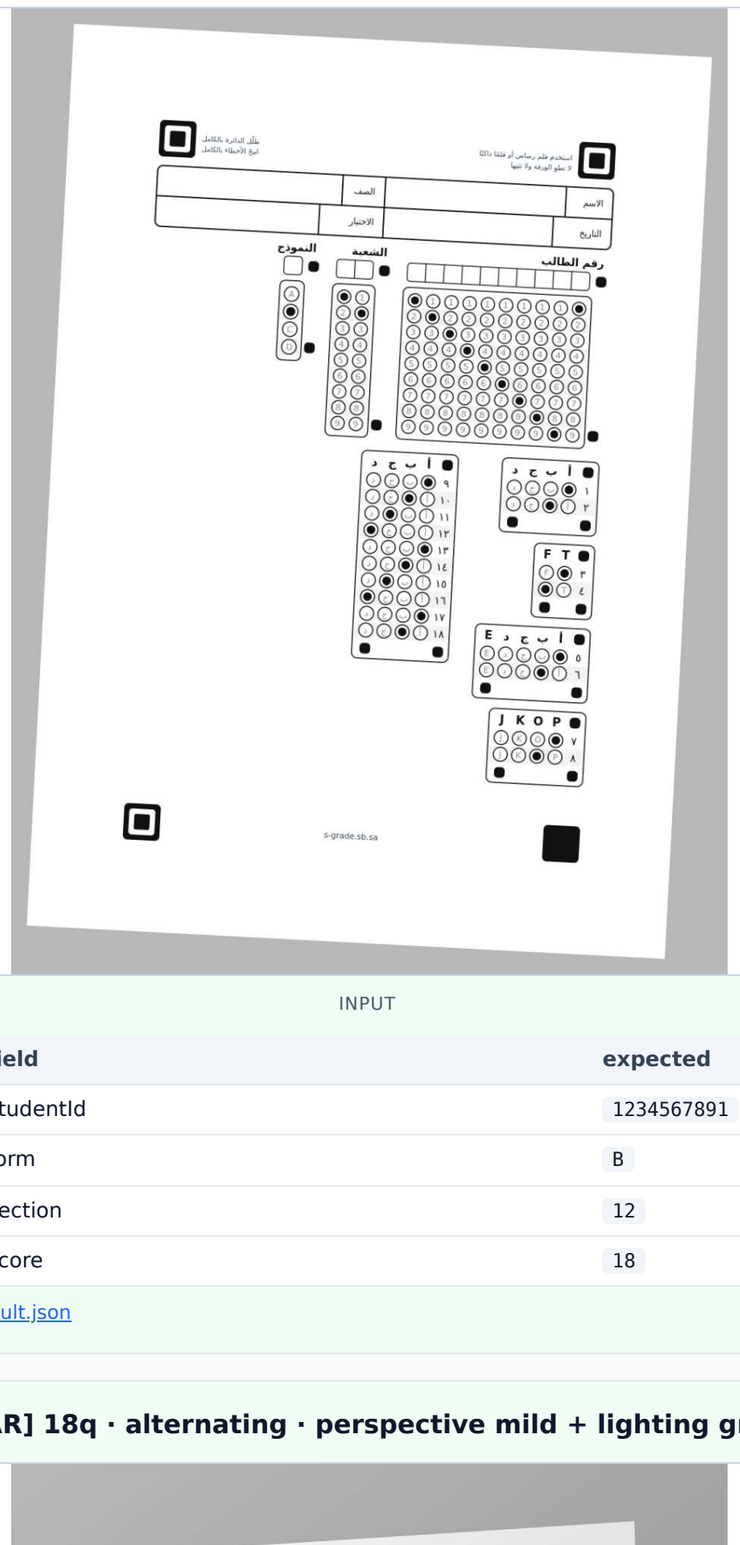
INPUT | WARPED | OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`B`	`B`	✓
section	`12`	`12`	✓
score	`18`	`18`	✓

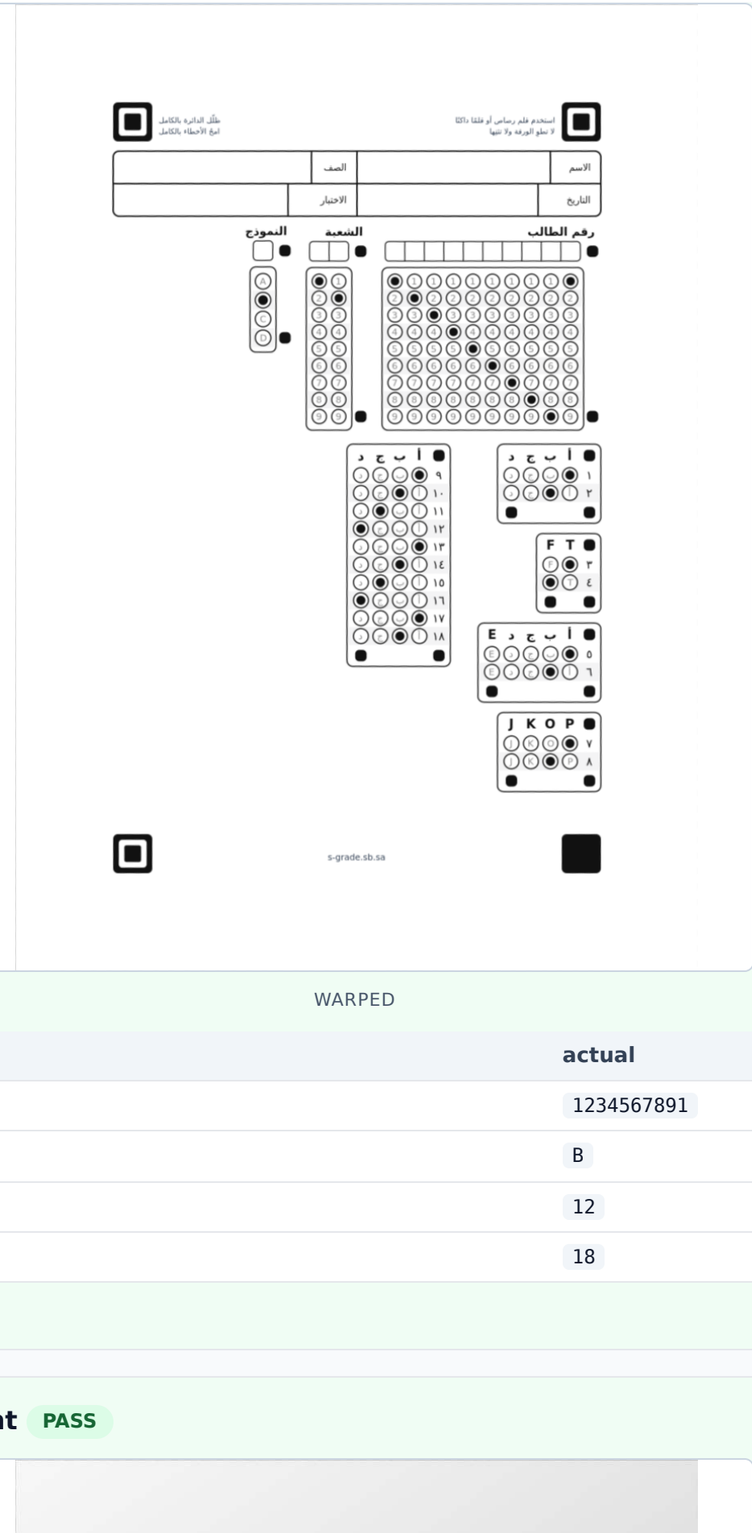
result.json

[AR] 18q · alternating · rotation 3deg PASS

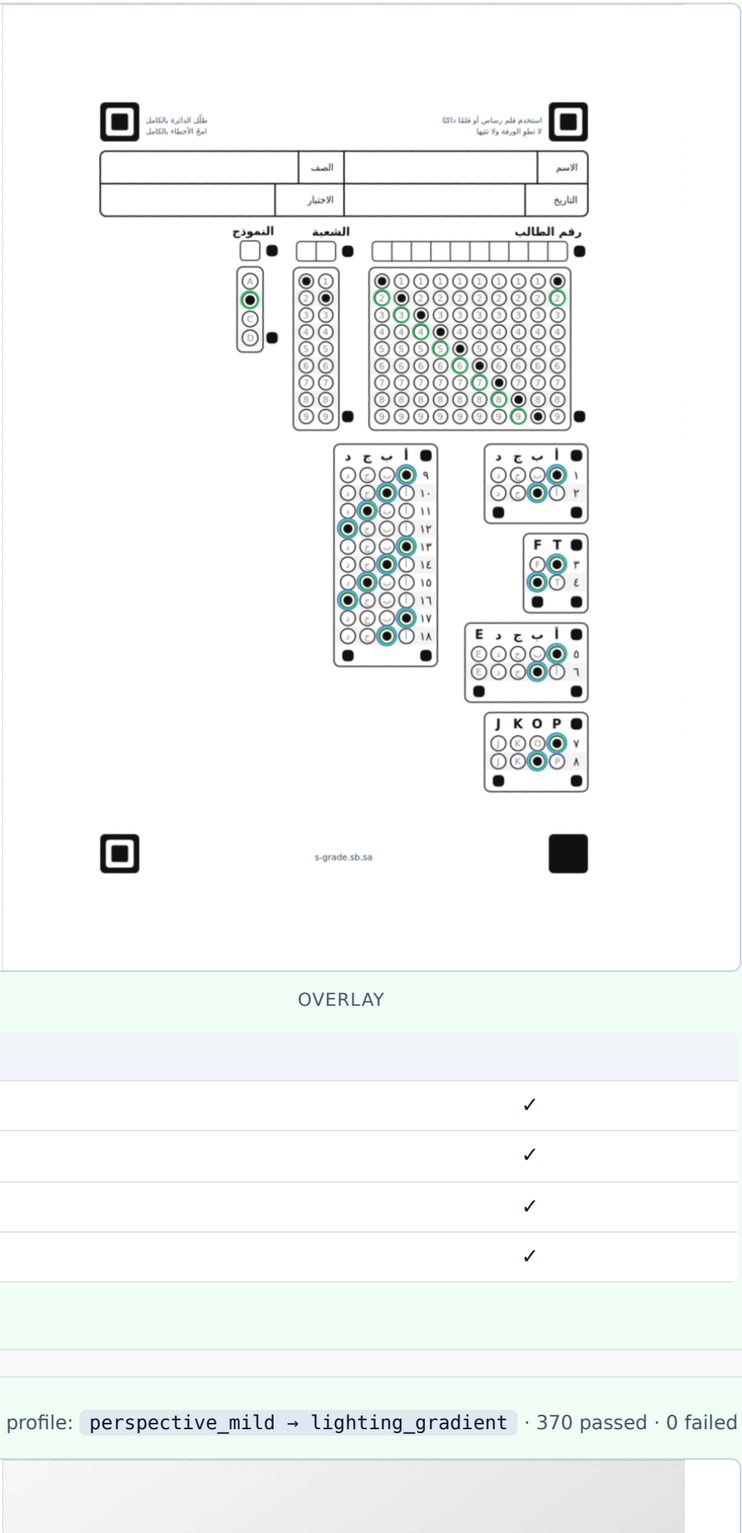
profile: `rotated_3deg` · 370 passed · 0 failed



INPUT



WARPED



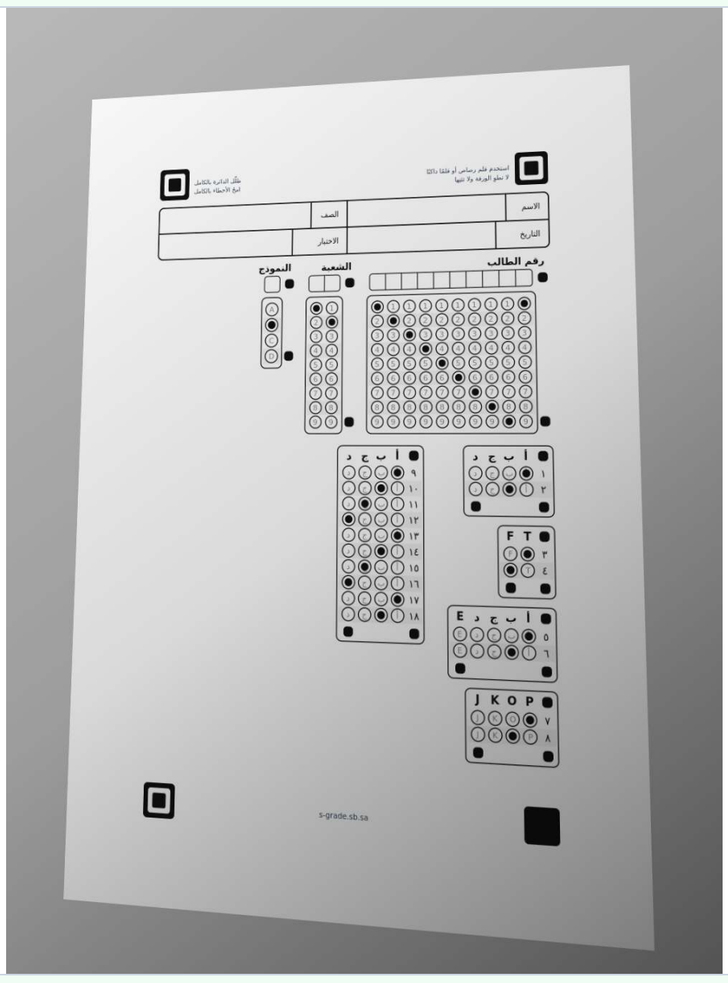
OVERLAY

field	expected	actual	
studentId	1234567891	1234567891	✓
form	B	B	✓
section	12	12	✓
score	18	18	✓

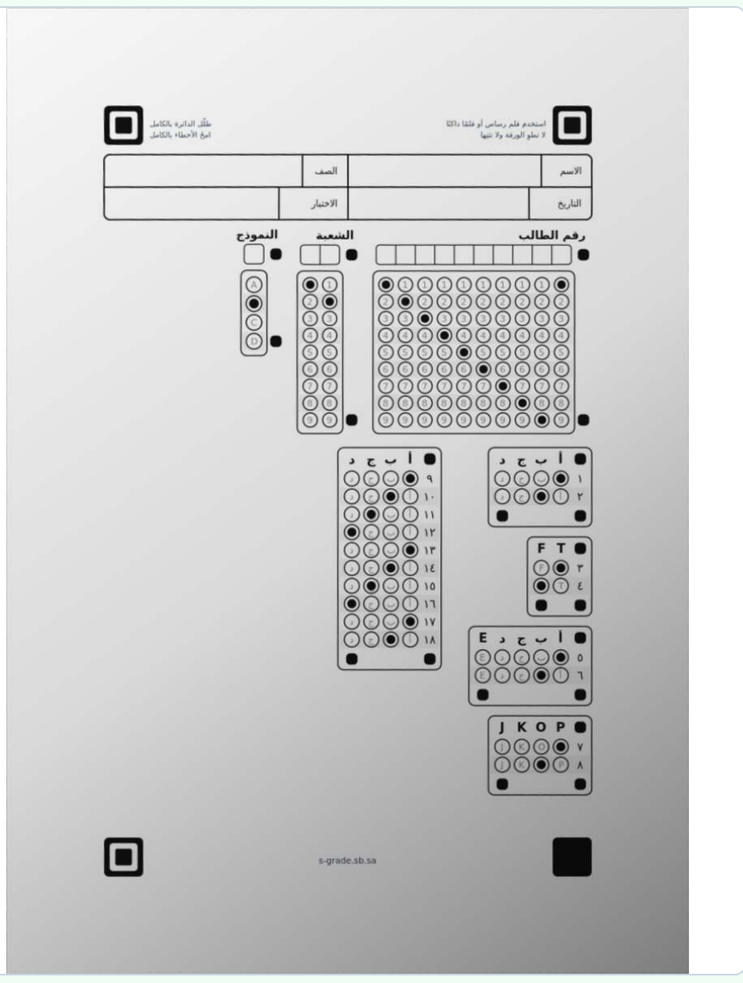
result.json

[AR] 18q · alternating · perspective mild + lighting gradient PASS

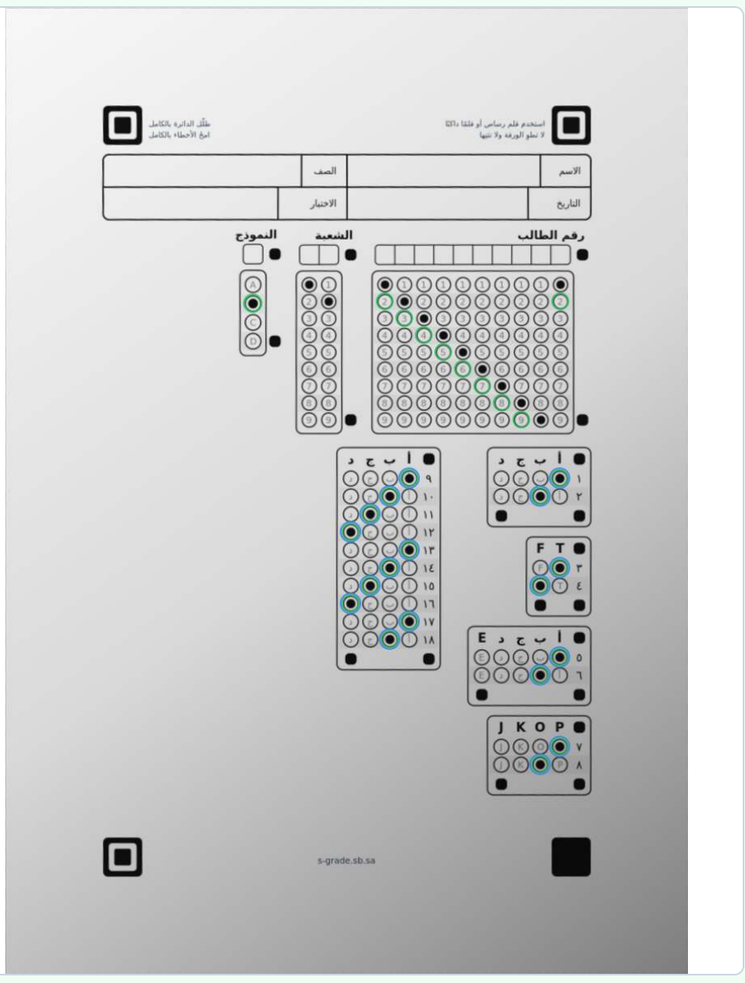
profile: `perspective_mild → lighting_gradient` · 370 passed · 0 failed



INPUT



WARPED



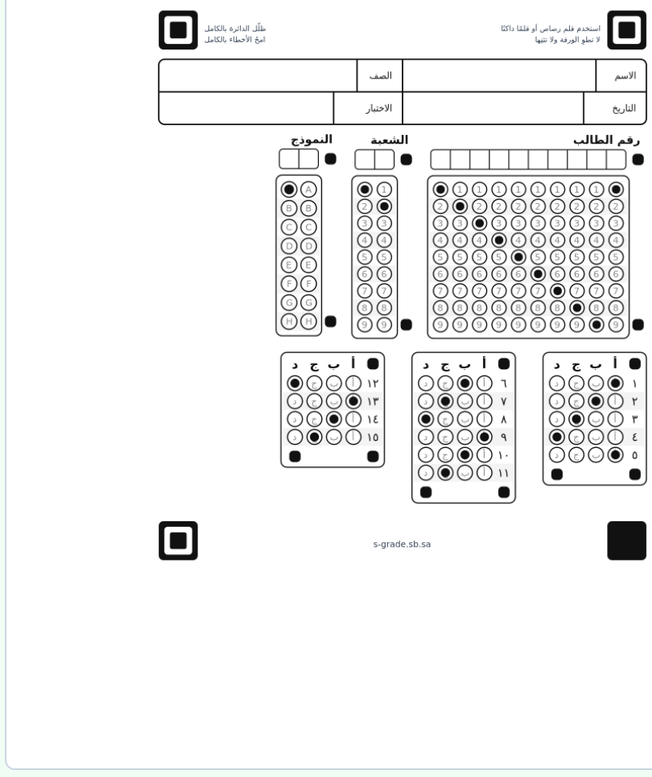
OVERLAY

field	expected	actual	
studentId	1234567891	1234567891	✓
form	B	B	✓
section	12	12	✓
score	18	18	✓

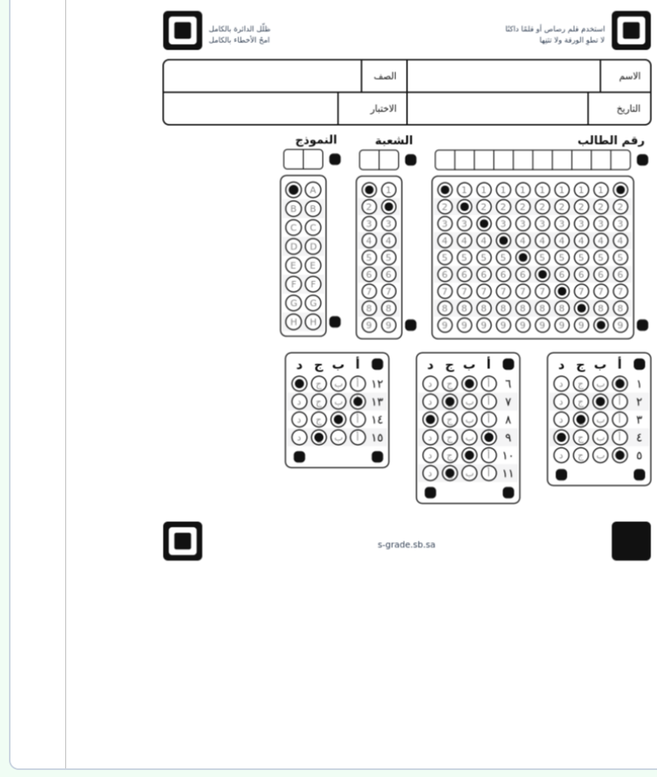
result.json

[AR] 15q · short quiz (margin 30/64, 2-col A-H key) · pristine PASS

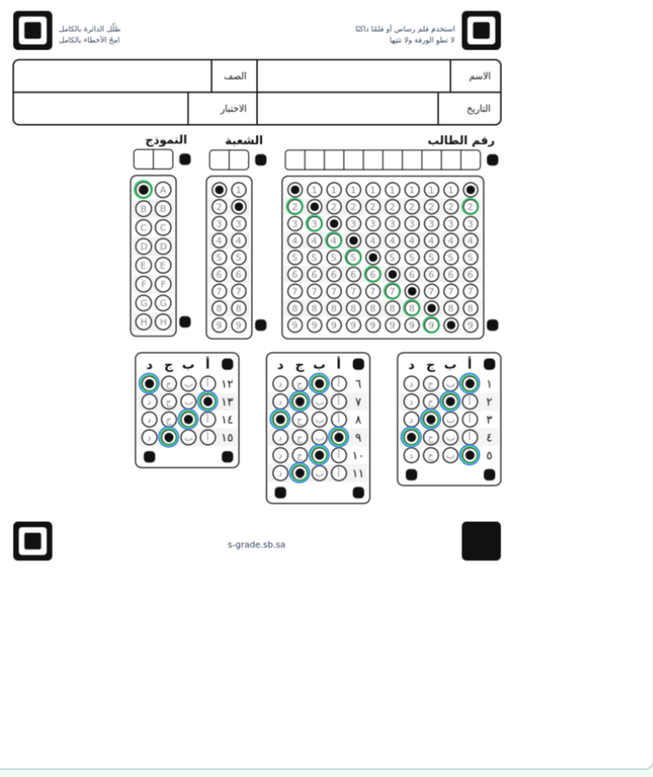
profile: `pristine` · 374 passed · 0 failed



INPUT



WARPED



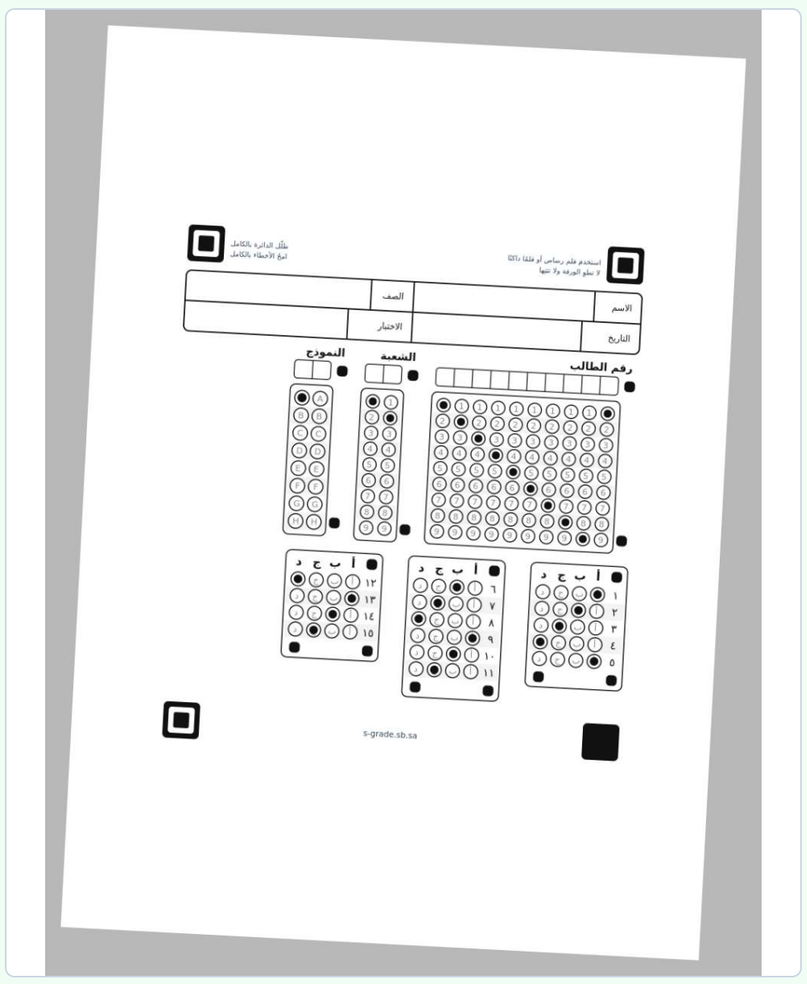
OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

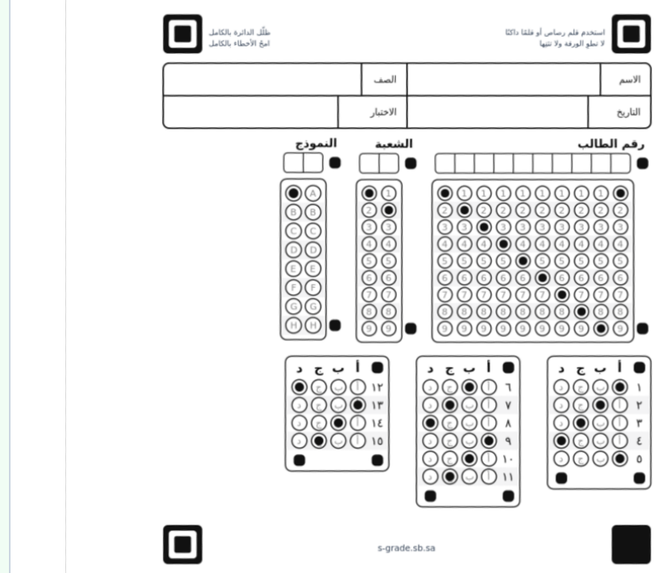
result.json

[AR] 15q · short quiz · rotation 3deg PASS

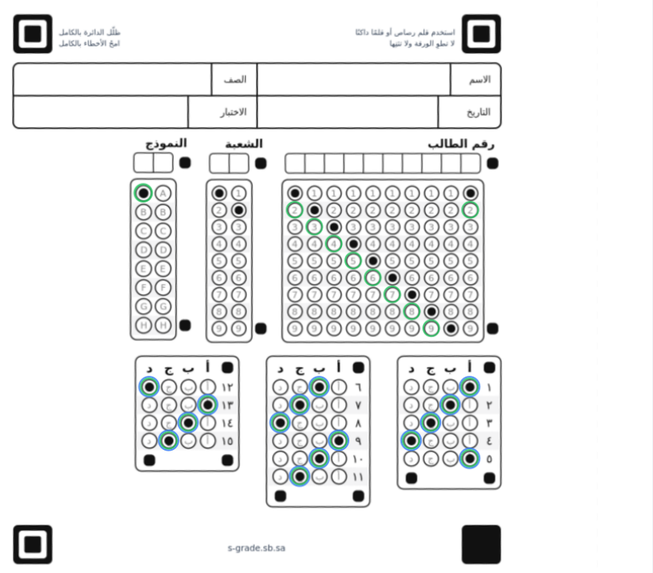
profile: `rotated_3deg` · 374 passed · 0 failed



INPUT



WARPED



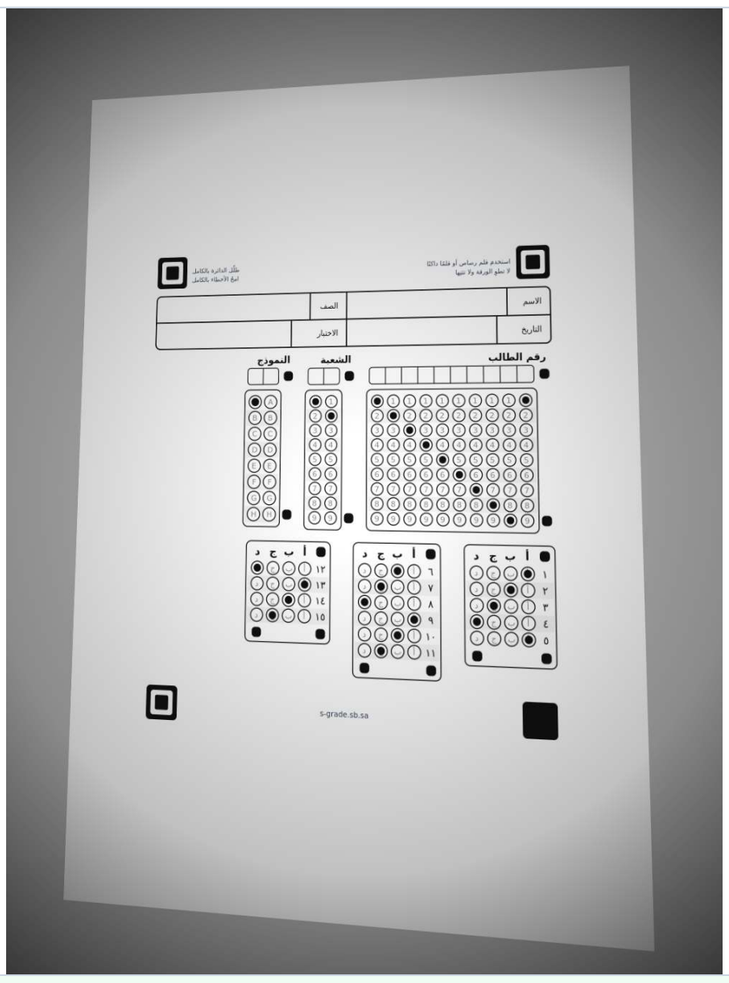
OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

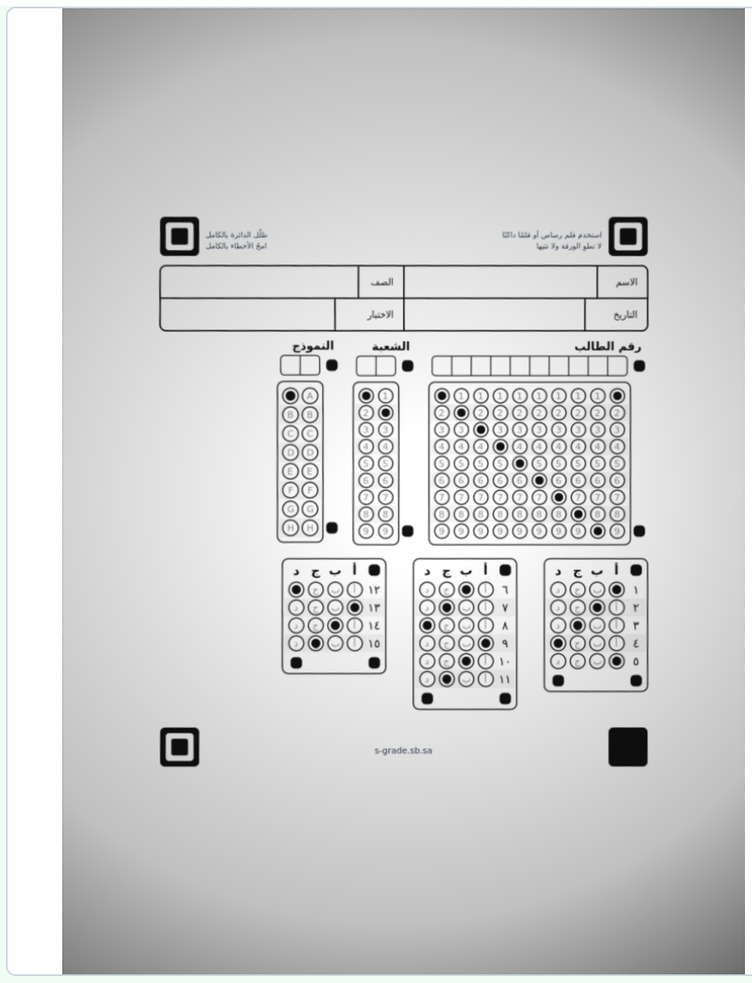
result.json

[AR] 15q · short quiz · perspective mild + lighting vignette PASS

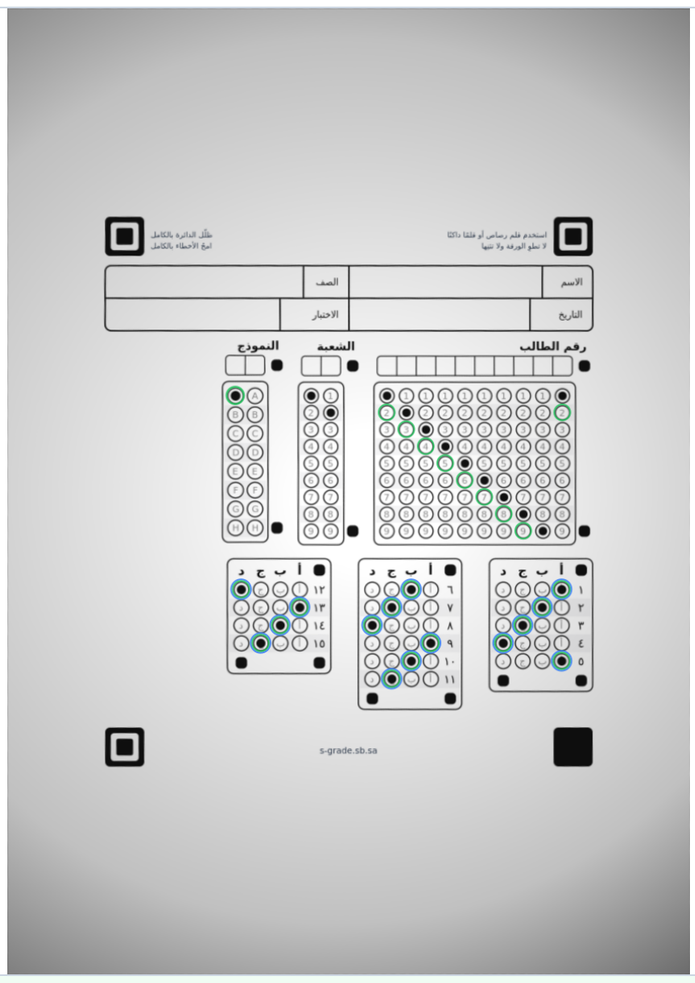
profile: `perspective_mild → lighting_vignette` · 374 passed · 0 failed



INPUT



WARPED



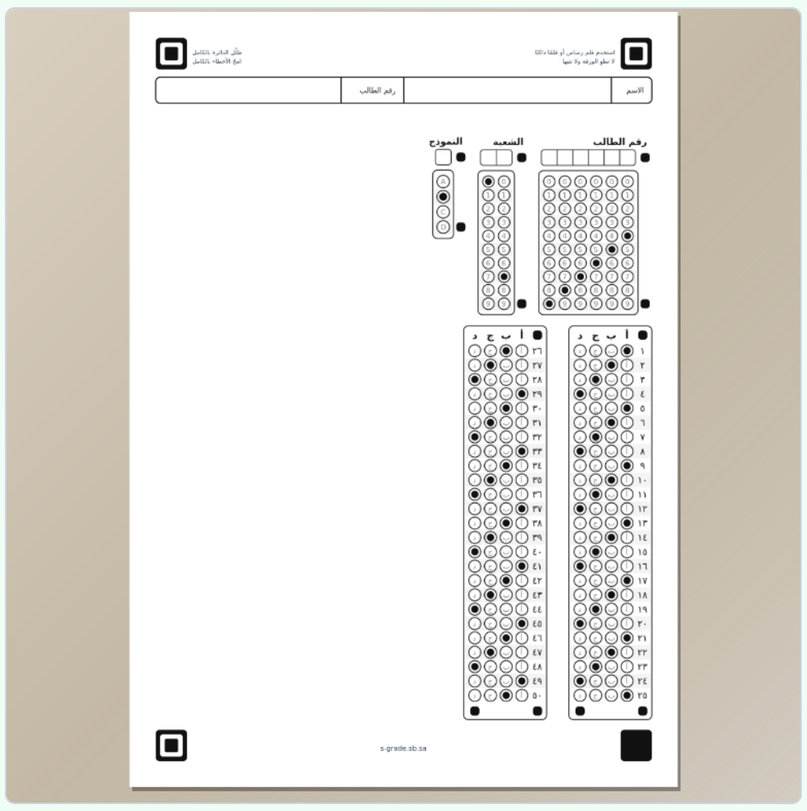
OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

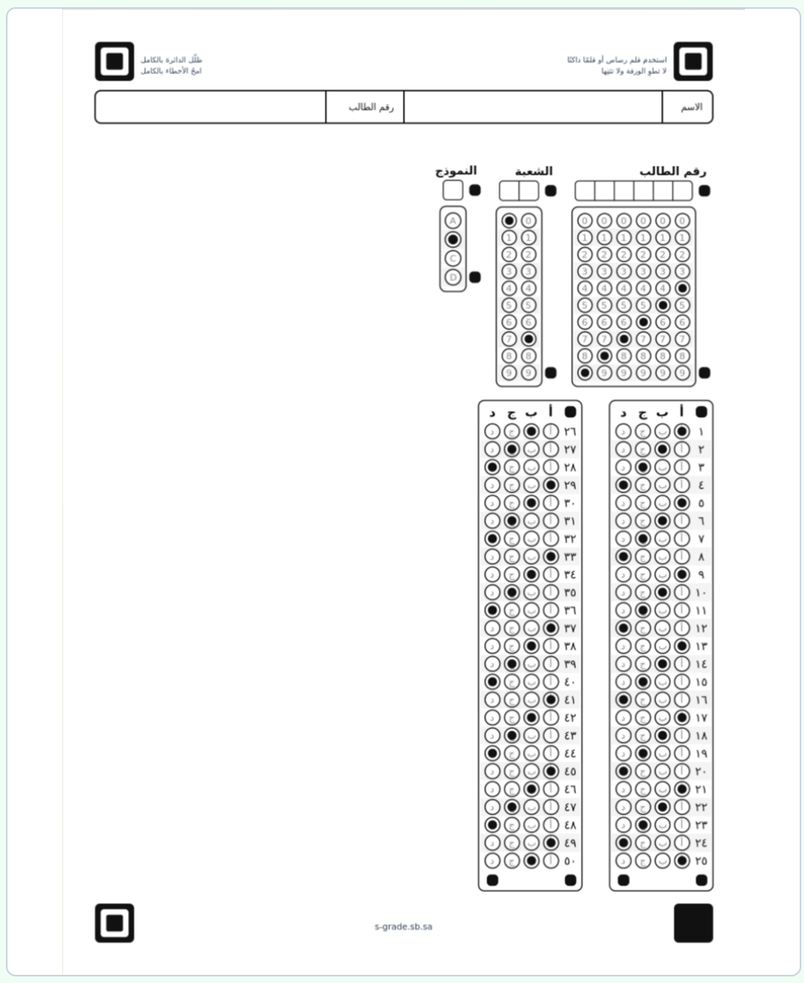
result.json

[AR] 50q · crop square (1:1) — sheet fills short axis PASS

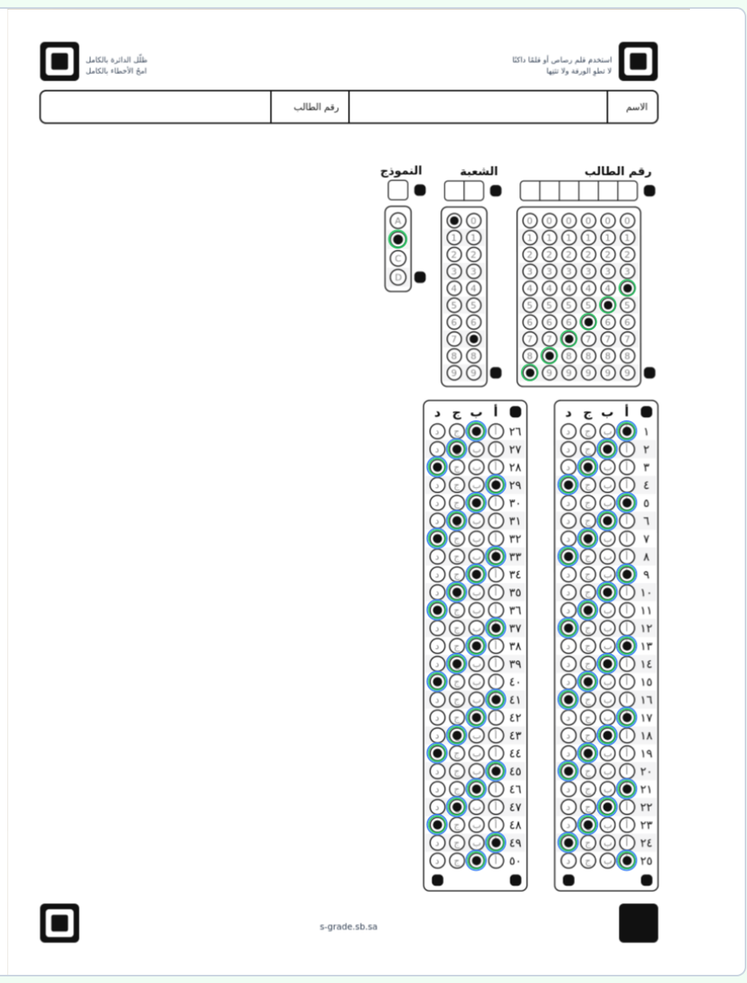
profile: `crop_square_tight` · 574 passed · 0 failed



INPUT



WARPED



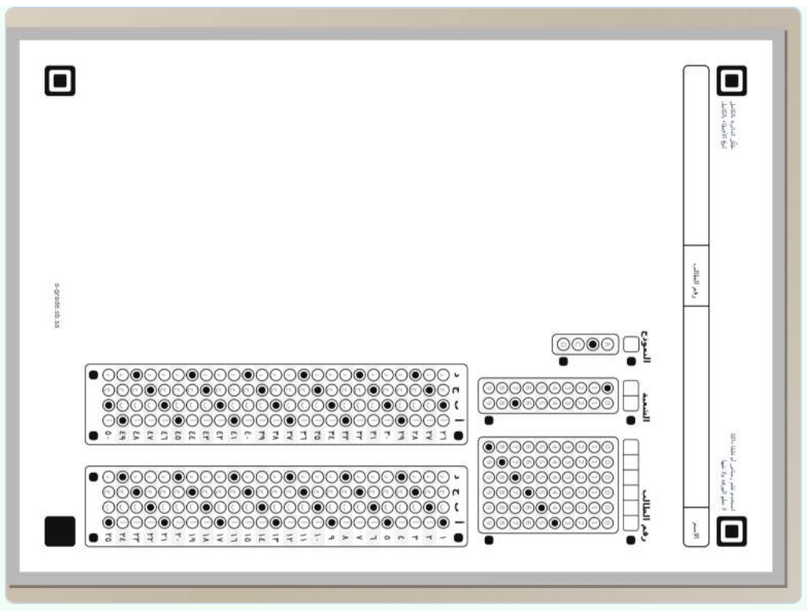
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

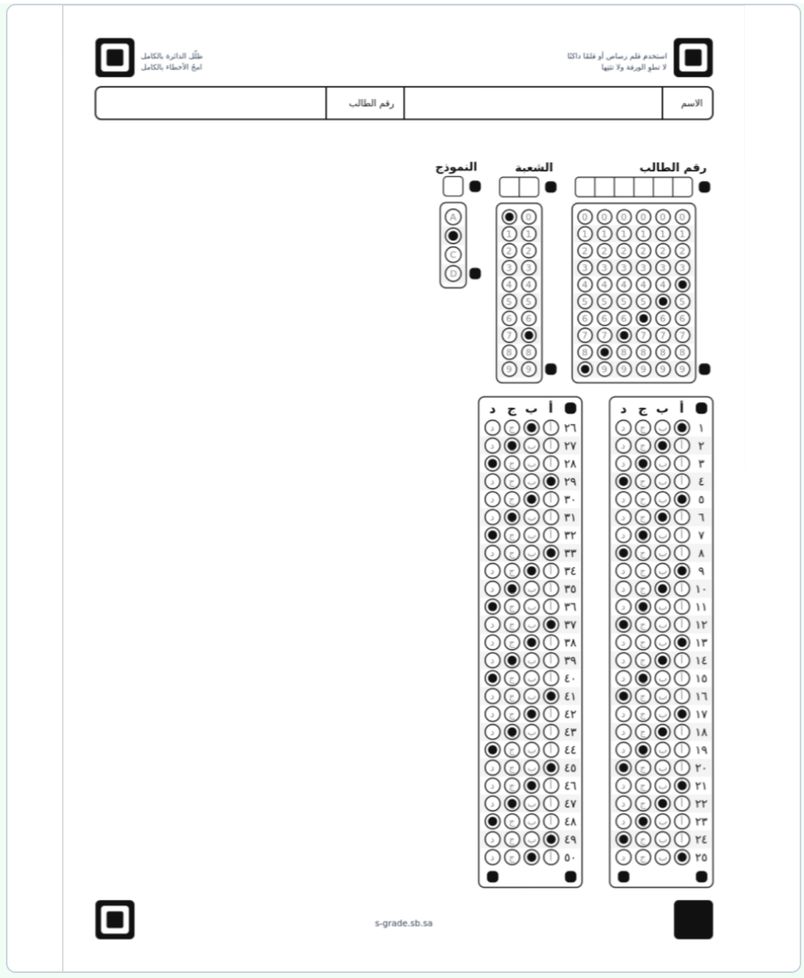
result.json

[AR] 50q · crop landscape 4:3 — sheet rotated 90° PASS

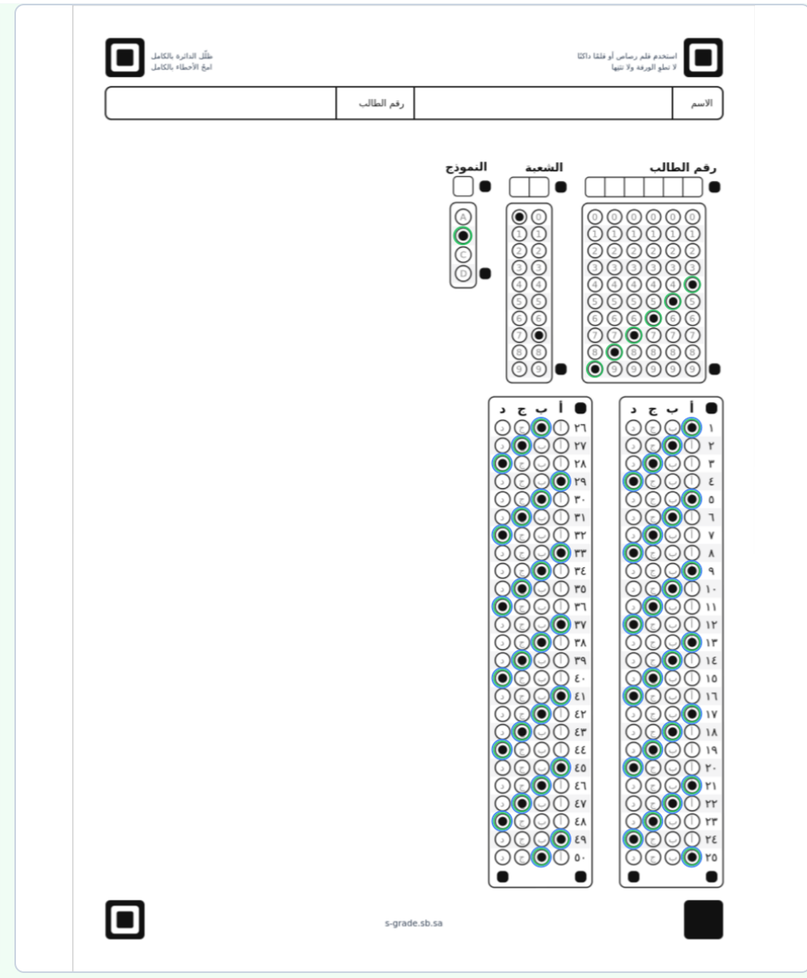
profile: `crop_4_3_landscape_tight` · 574 passed · 0 failed



INPUT



WARPED



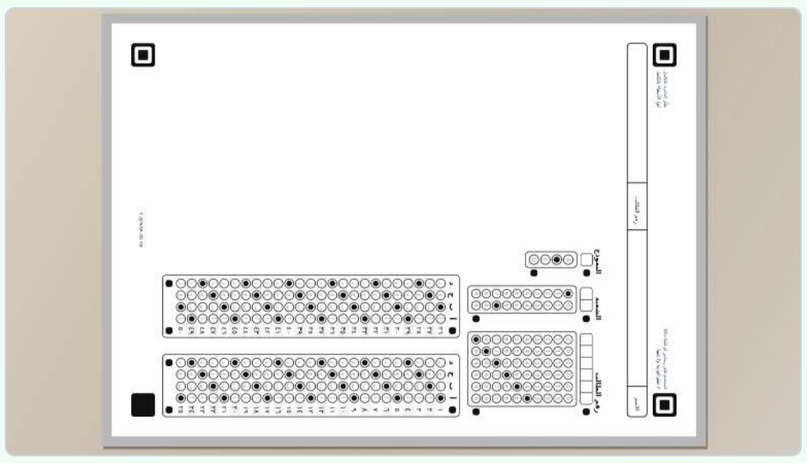
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

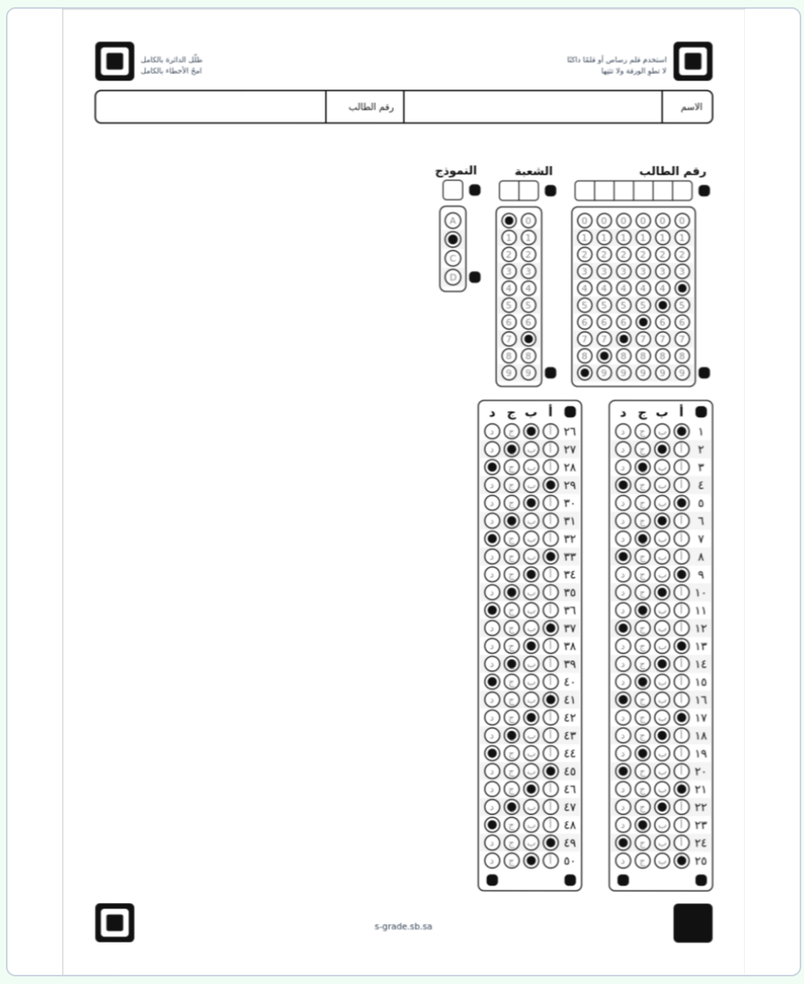
result.json

[AR] 50q · crop landscape 16:9 — sheet rotated 90° PASS

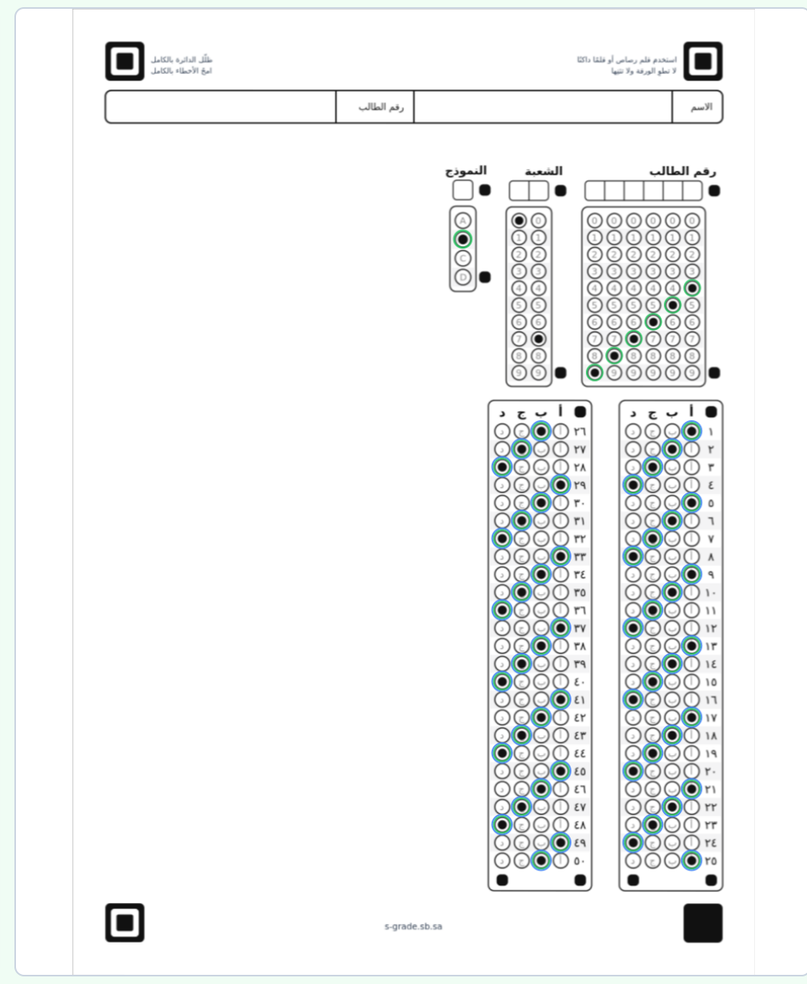
profile: `crop_16_9_landscape_tight` · 574 passed · 0 failed



INPUT



WARPED



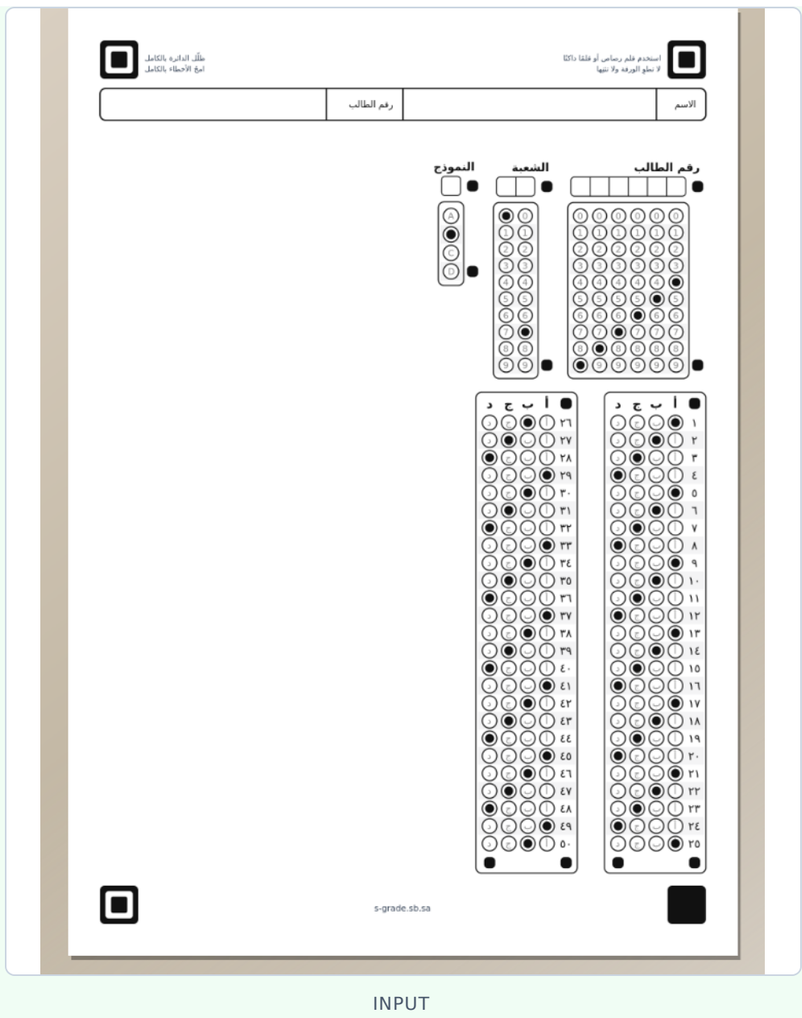
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

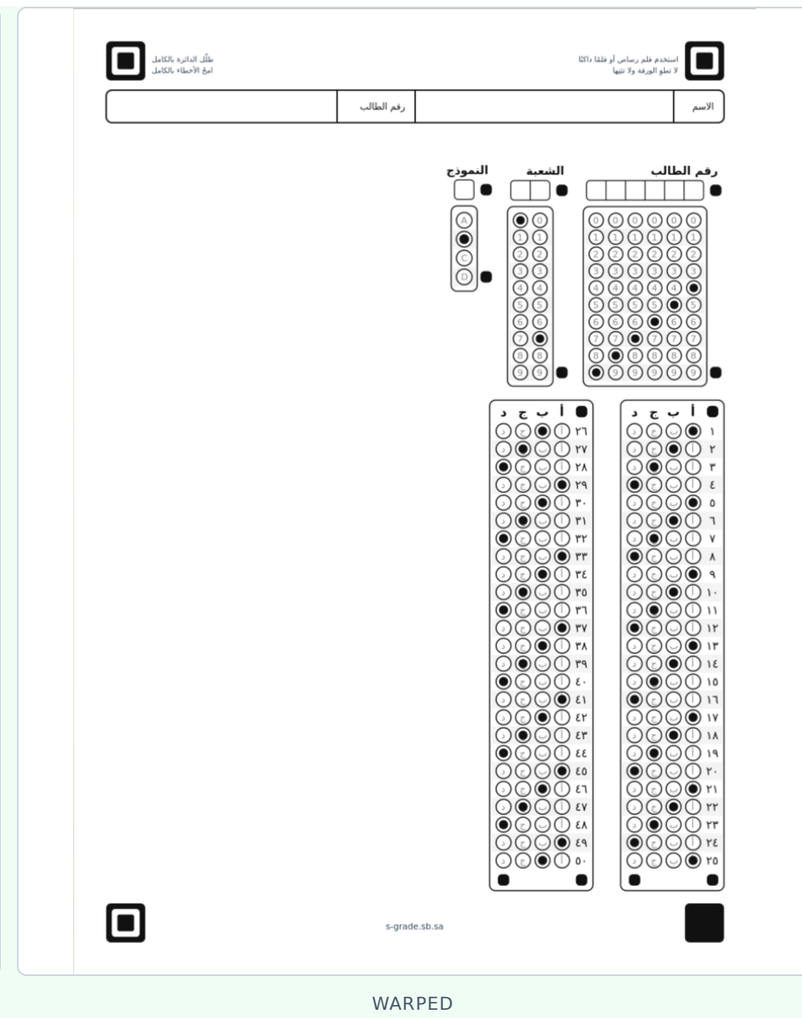
result.json

[AR] 50q · crop portrait 3:4 — sheet edge-to-edge horizontally PASS

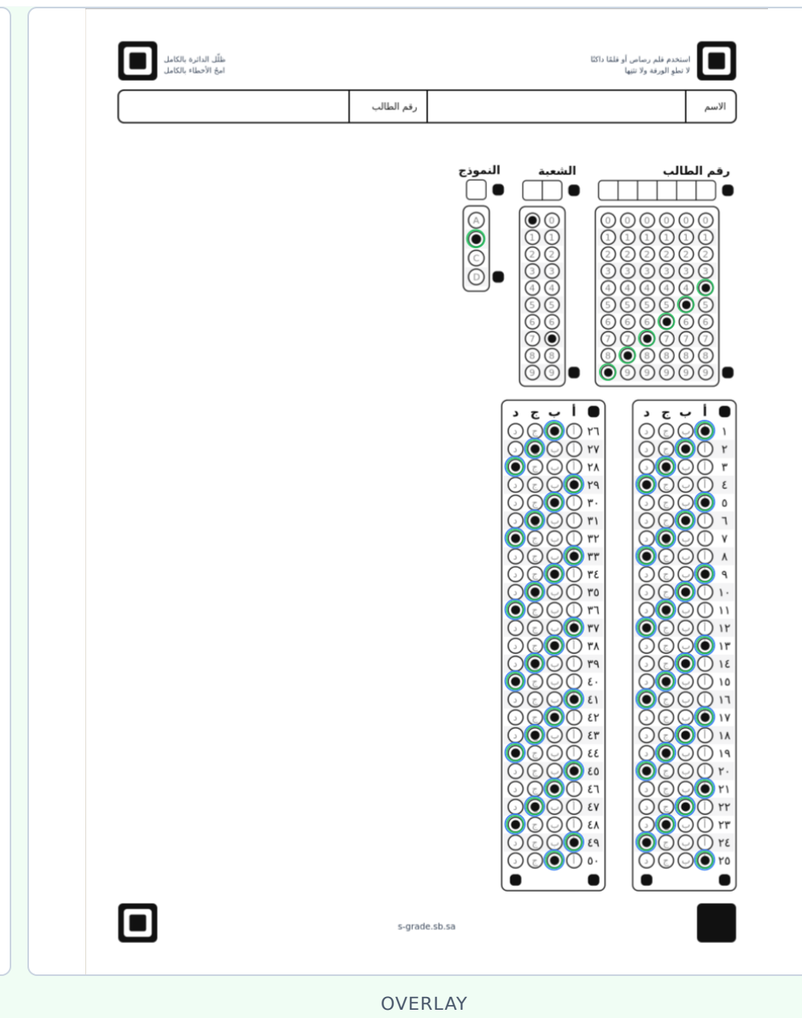
profile: `crop_3_4_portrait_tight` · 574 passed · 0 failed



INPUT



WARPED



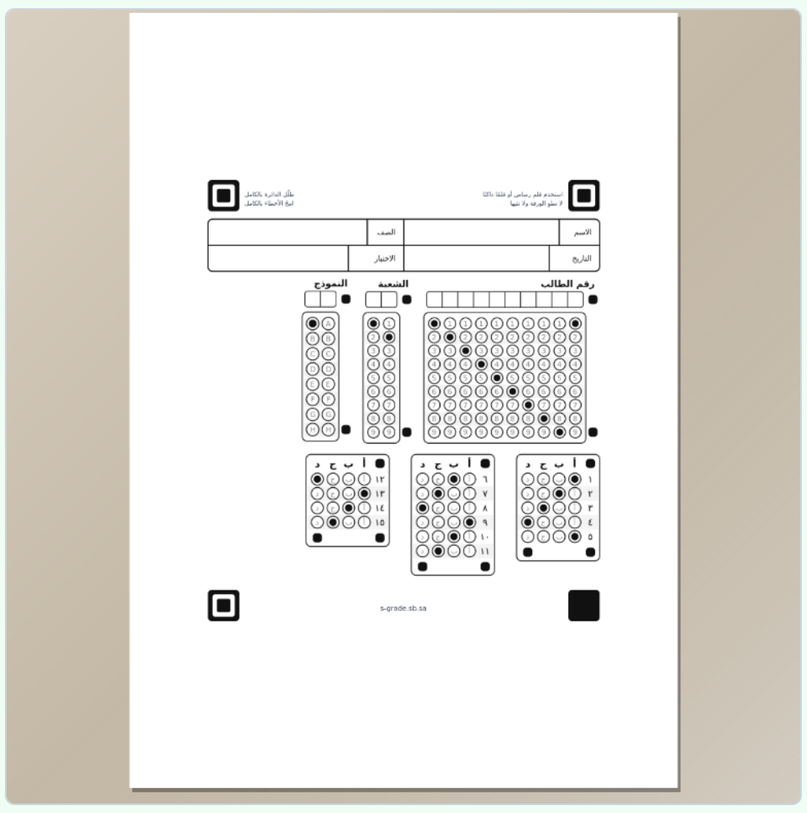
OVERLAY

field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

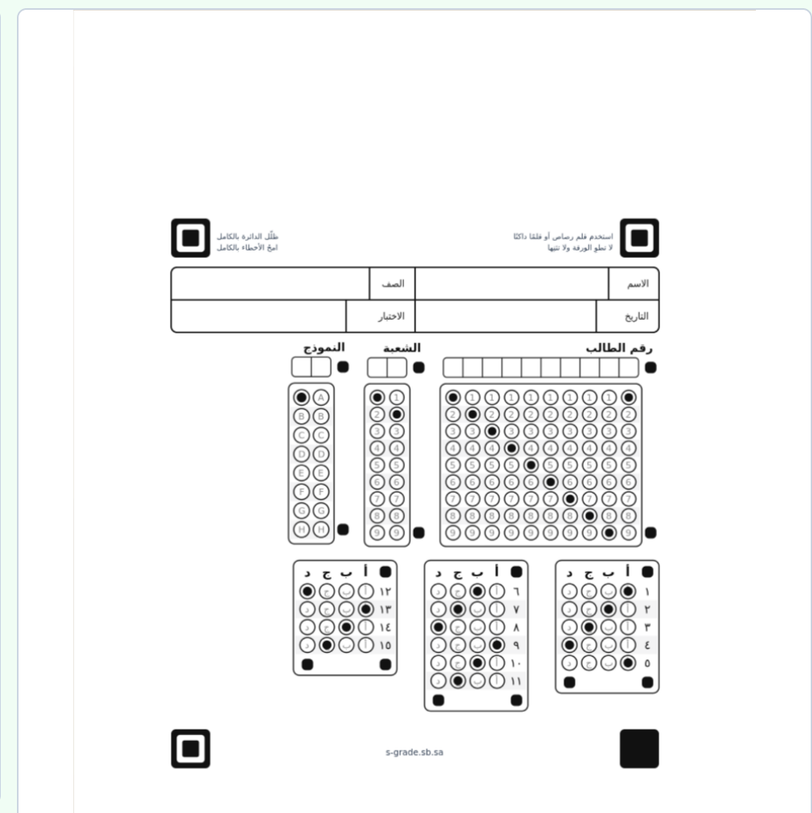
result.json

[AR] 15q · short quiz · crop square (1:1) PASS

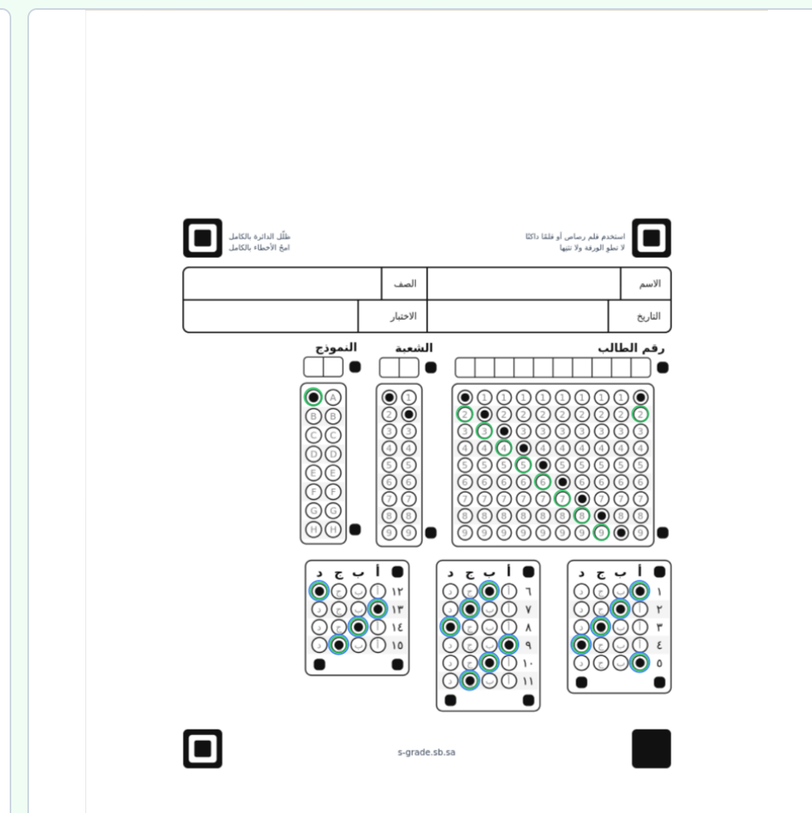
profile: `crop_square_tight` · 374 passed · 0 failed



INPUT



WARPED



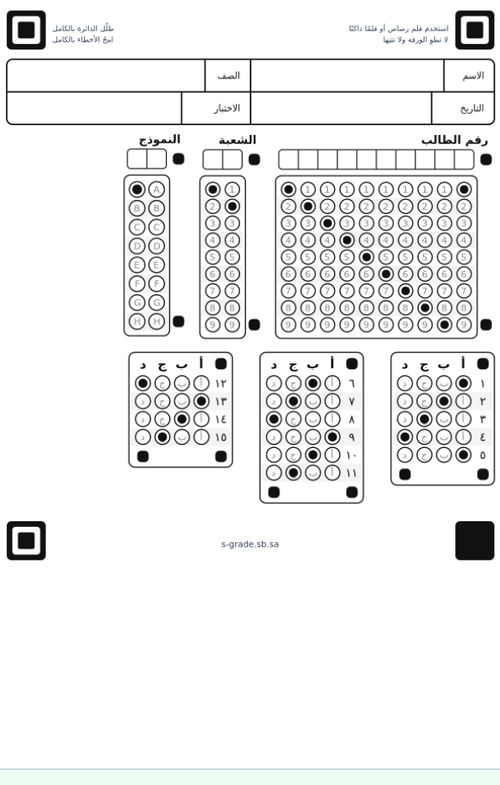
OVERLAY

field	expected	actual	
studentId	`1234567891`	`1234567891`	✓
form	`A`	`A`	✓
section	`12`	`12`	✓
score	`15`	`15`	✓

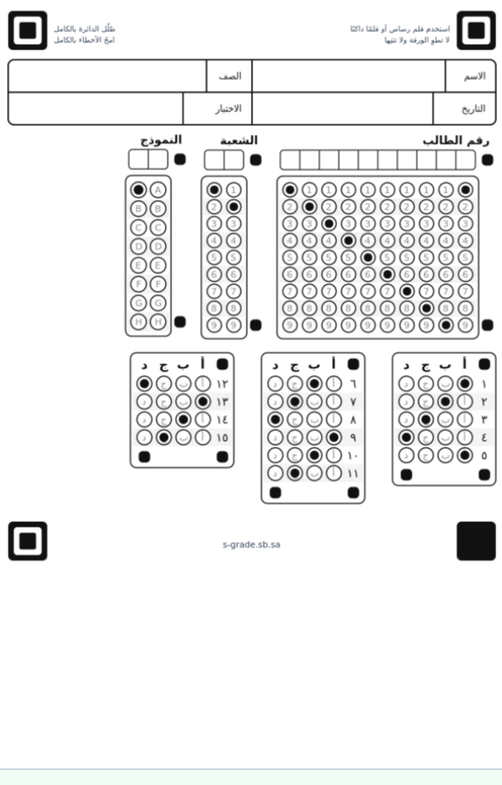
result.json

[AR] 15q · short quiz · cropped to paper edges (no margin) PASS

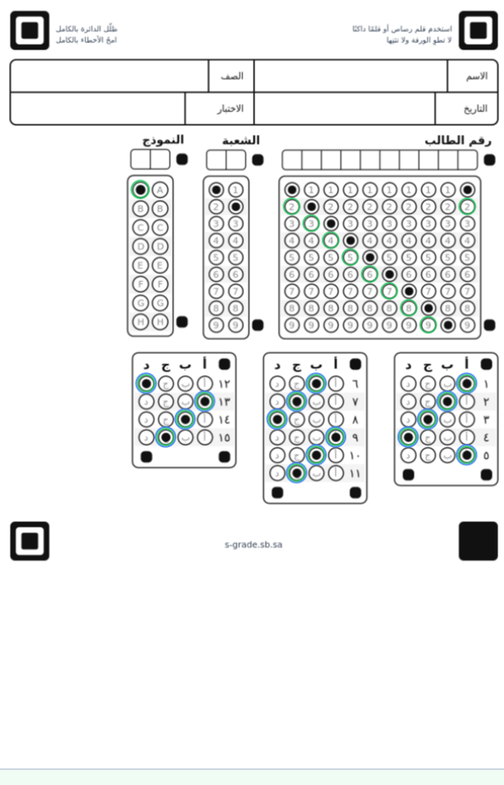
profile: `crop_to_paper_edges` · 374 passed · 0 failed



INPUT



WARPED



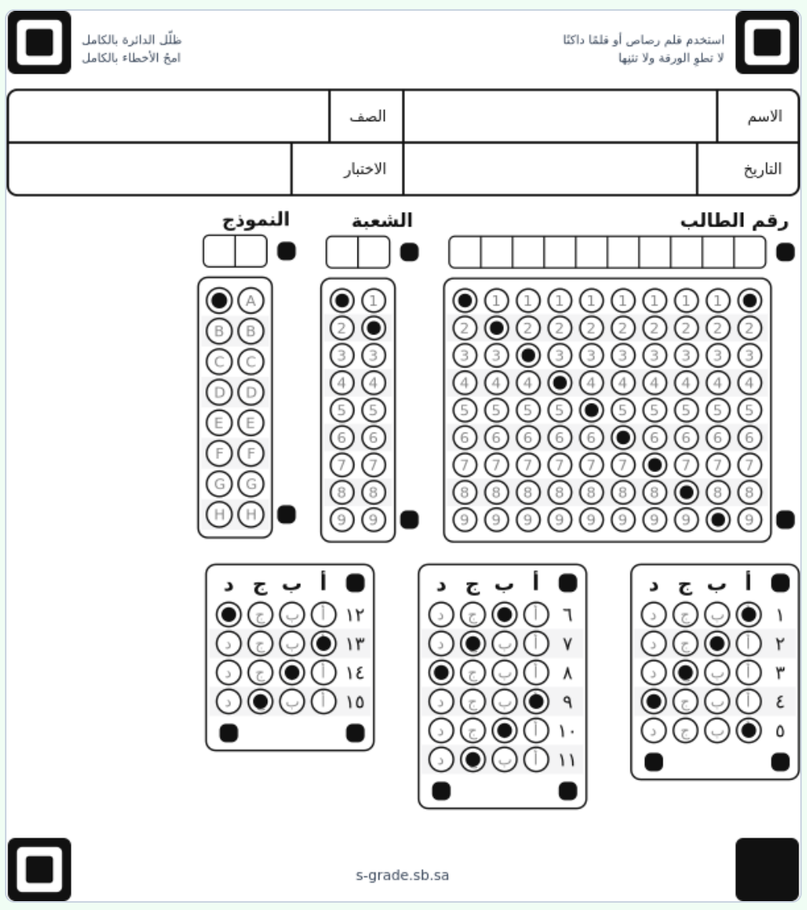
OVERLAY

field	expected	actual	
studentId	1234567891	1234567891	✓
form	A	A	✓
section	12	12	✓
score	15	15	✓

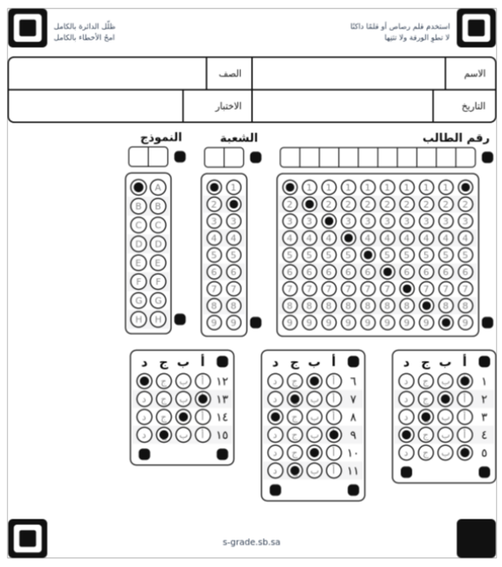
result.json

[AR] 15q · short quiz · cropped to fiducial quad (edge fiducials) PASS

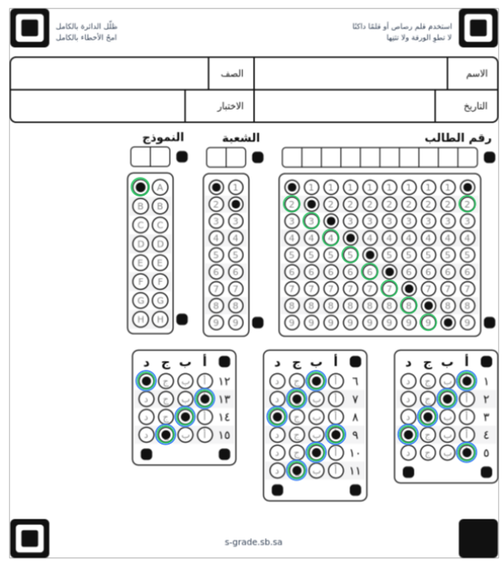
profile: `crop_to_fiducial_quad` · 374 passed · 0 failed



INPUT



WARPED



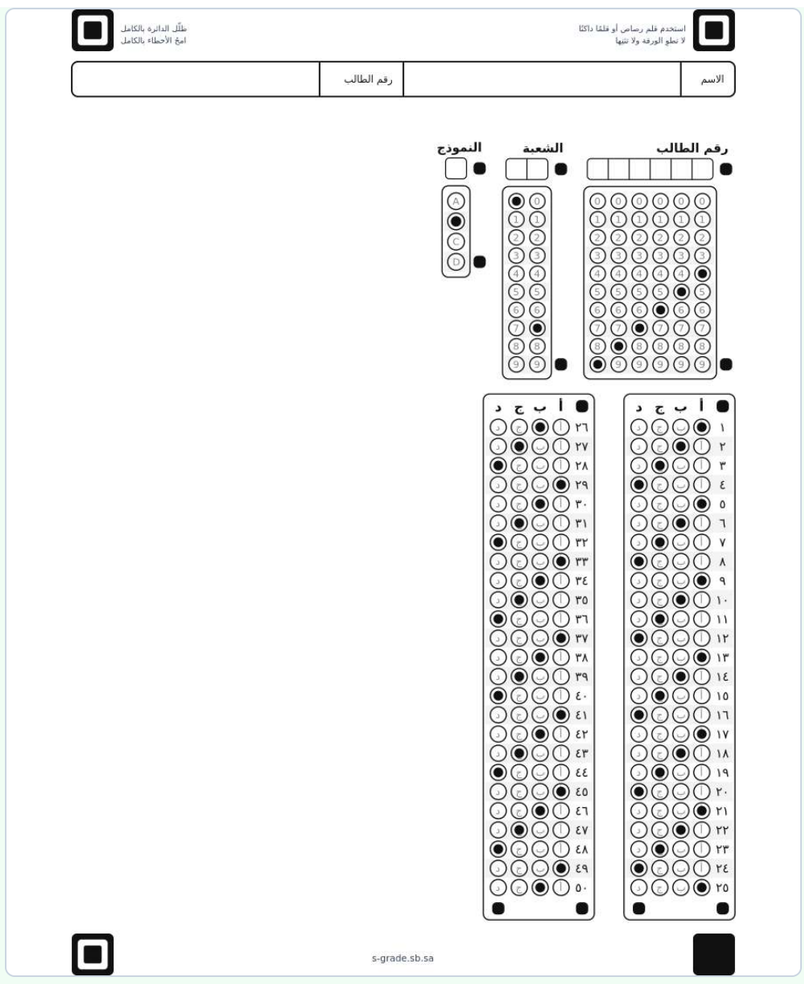
OVERLAY

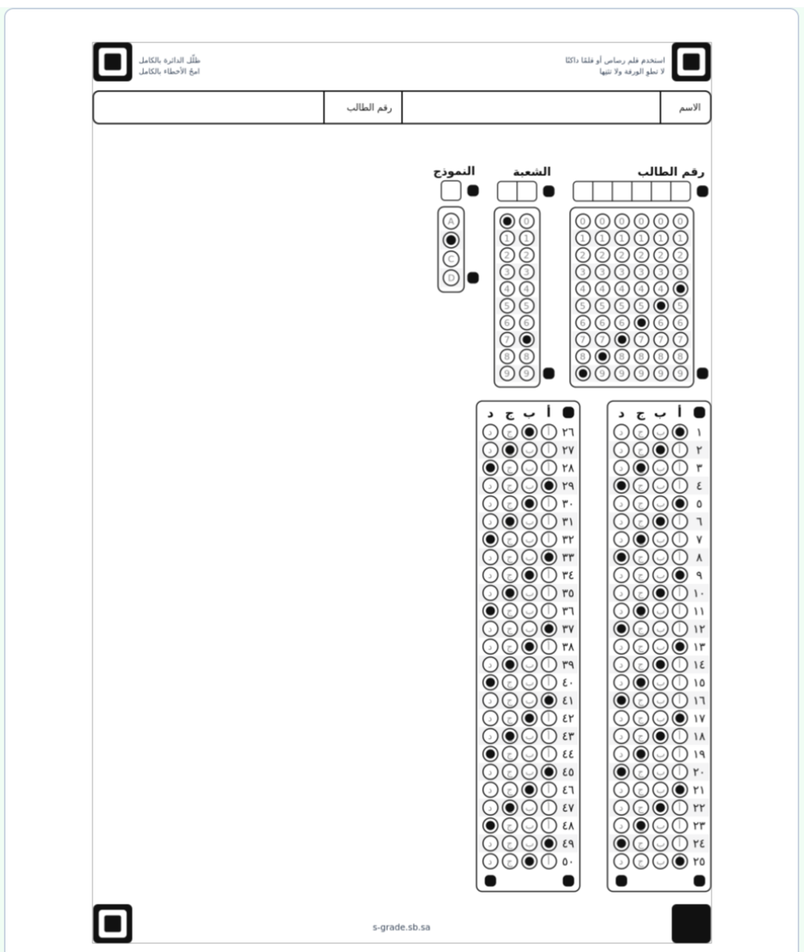
field	expected	actual	
studentId	1234567891	1234567891	✓
form	A	A	✓
section	12	12	✓
score	15	15	✓

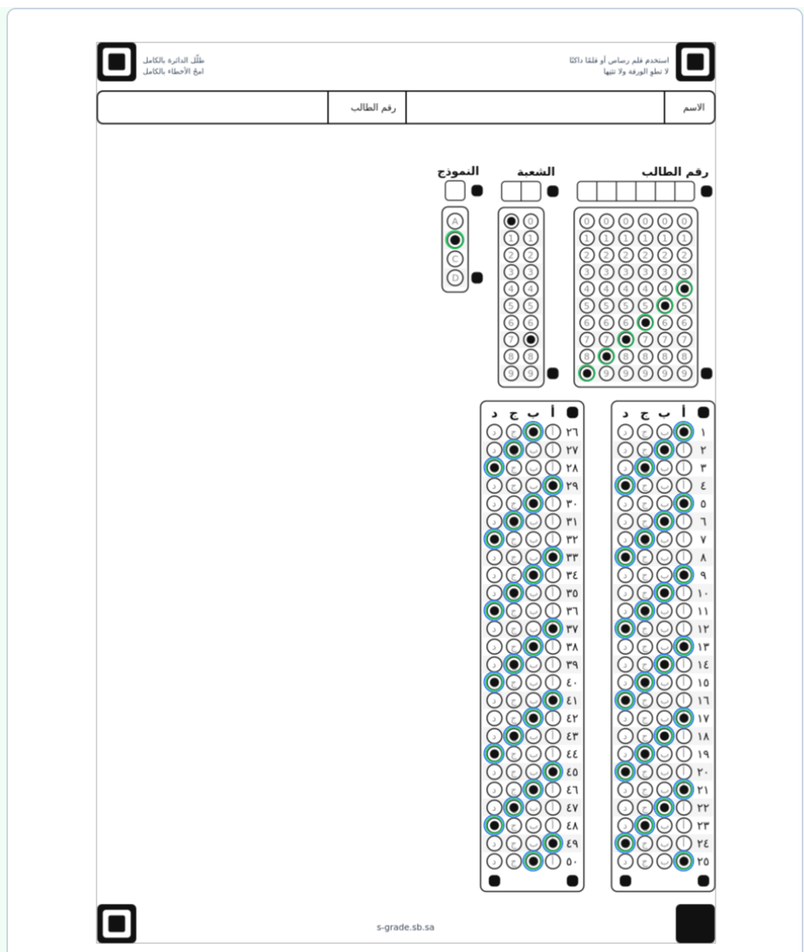
result.json

[AR] 50q · mid · cropped to fiducial quad (edge fiducials) PASS

profile: `crop_to_fiducial_quad` · 574 passed · 0 failed







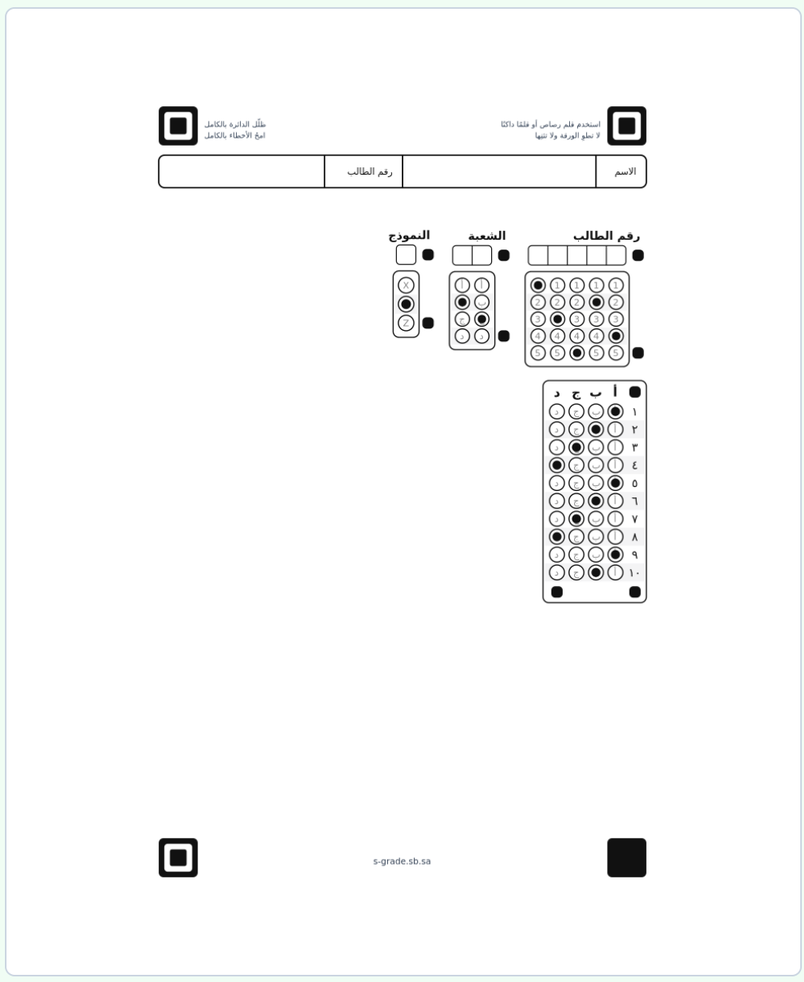
INPUT | WARPED | OVERLAY

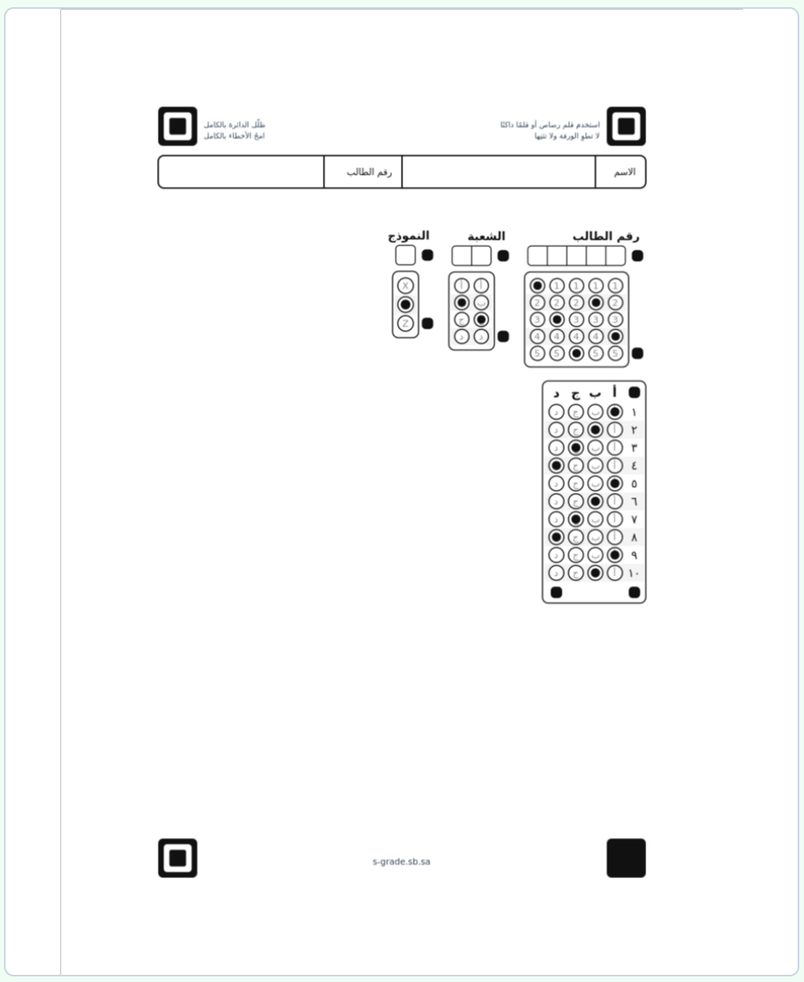
field	expected	actual	
studentId	`987654`	`987654`	✓
form	`B`	`B`	✓
section	`07`	`07`	✓
score	`50`	`50`	✓

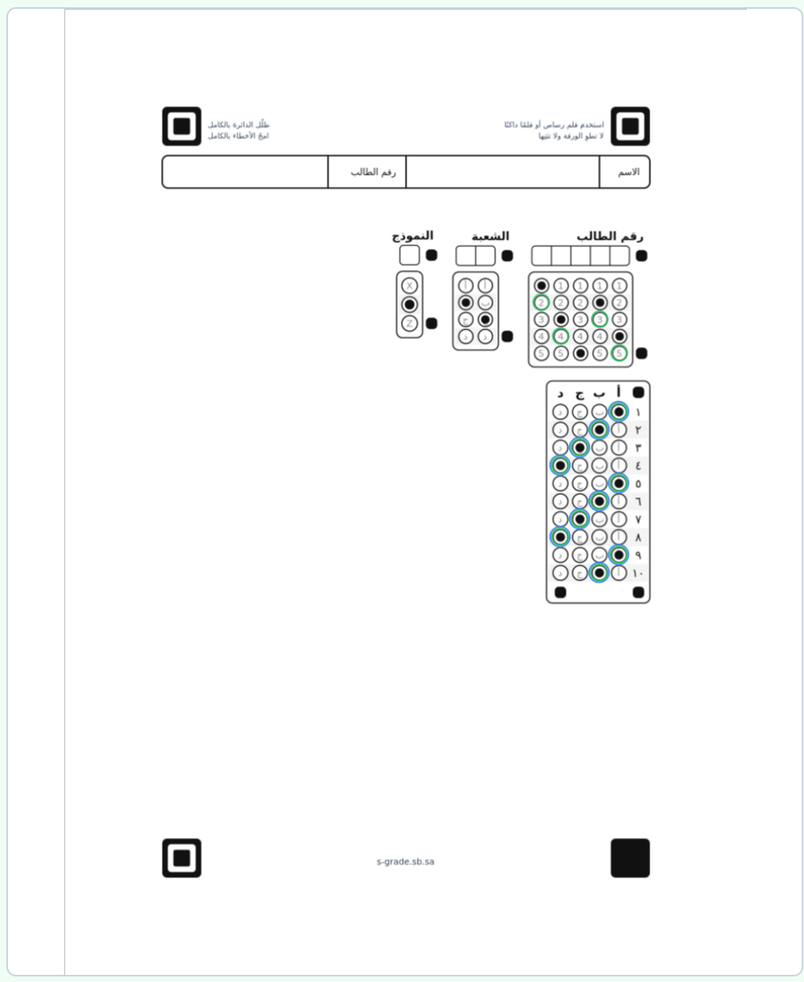
result.json

[AR] 10q · custom-labels (SID 1-5, sec أ-د, key X-Z) · pristine PASS

profile: `pristine` · 158 passed · 0 failed







INPUT | WARPED | OVERLAY

field	expected	actual	
studentId	`13524`	`13524`	✓
form	`Y`	`Y`	✓
section	`جـ`	`جـ`	✓
score	`10`	`10`	✓

result.json