Implied Grade Boundaries

JZ Mock Papers

5 sets, 10 papers

Anchored to: the published TMUA conversion tables, 2017–2023.
Scale: official 2017–23 grades beside estimated 2024+ equivalents.
Calibration date: 10 October 2026

How the estimates are calculated

These figures are implied by the model. At a high level, for a boundary such as 6.5, we ask: what raw score would the model expect a student of 6.5 ability to achieve on this paper? This is a simplified description, but it captures the basic idea behind the implied grade boundaries.

The scales used

Two scales are shown side by side.

The first is the official TMUA scale used between 2017 and 2023. The model is anchored to the conversion tables published for those years, which are the most recent official raw-mark tables available — none have been published from 2024 onwards.

The second is an estimate of what the same performance is worth on the 2024+ scale. When the exam changed hands the scale was tightened noticeably through the middle, so a grade on the older scale is not worth the same today. There is no official conversion for this, so it is an estimate, using my best available information.

This is the same pair of readings I show students on their dashboard.

A note on possible bias

The model values for student abilities and question difficulties are derived from question attempts made by students on my site, whom I think are likely to be stronger and more engaged than the overall TMUA cohort. Do not get too excited—you still have to work hard! 🙂

The net effect of this, and I am only conjecturing, is that the implied grade boundaries may be higher than the national equivalents. This means that if you are on 7.1 here, nationally that might be closer to 7.3. Again, I am only giving you my opinion, which could be completely wrong.

— *Joe Zhou*

JZ Mock A

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Individual papers

Paper 1
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.4	2.6
2	4.2	3.2
3	4.7	3.6
4	5.0	3.8
5	5.3	4.0
6	5.6	4.2
7	5.9	4.4
8	6.1	4.6
9	6.3	4.9
10	6.5	5.2
11	6.8	5.6
12	7.0	5.9
13	7.2	6.3
14	7.5	6.9
15	7.7	7.3
16	8.0	7.9
17	8.4	8.4
18	8.9	8.9
19	9.0	9.0
20	9.0	9.0

Paper 2
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.3	2.5
2	4.1	3.1
3	4.6	3.5
4	5.0	3.8
5	5.3	4.0
6	5.6	4.2
7	5.9	4.4
8	6.1	4.6
9	6.4	5.0
10	6.6	5.3
11	6.8	5.6
12	7.1	6.1
13	7.3	6.5
14	7.6	7.1
15	7.9	7.7
16	8.2	8.2
17	8.6	8.6
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

JZ Mock A

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Both papers combined

Total out of 40

Score	2017–23	2024+	Score	2017–23	2024+
0	1.0	1.0	21	6.7	5.5
1	2.6	2.0	22	6.8	5.6
2	3.3	2.5	23	6.9	5.7
3	3.8	2.9	24	7.0	5.9
4	4.1	3.1	25	7.1	6.1
5	4.4	3.3	26	7.3	6.5
6	4.6	3.5	27	7.4	6.7
7	4.8	3.6	28	7.5	6.9
8	5.0	3.8	29	7.7	7.3
9	5.2	3.9	30	7.8	7.5
10	5.3	4.0	31	7.9	7.7
11	5.5	4.1	32	8.1	8.1
12	5.6	4.2	33	8.3	8.3
13	5.7	4.2	34	8.5	8.5
14	5.9	4.4	35	8.7	8.7
15	6.0	4.4	36	9.0	9.0
16	6.1	4.6	37	9.0	9.0
17	6.2	4.7	38	9.0	9.0
18	6.3	4.9	39	9.0	9.0
19	6.5	5.2	40	9.0	9.0
20	6.6	5.3			

JZ Mock B

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Individual papers

Paper 1
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.3	2.5
2	4.1	3.1
3	4.7	3.6
4	5.1	3.8
5	5.4	4.0
6	5.7	4.2
7	6.0	4.4
8	6.3	4.9
9	6.5	5.2
10	6.8	5.6
11	7.0	5.9
12	7.3	6.5
13	7.5	6.9
14	7.8	7.5
15	8.1	8.1
16	8.4	8.4
17	8.8	8.8
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

Paper 2
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.5	2.7
2	4.3	3.3
3	4.8	3.6
4	5.2	3.9
5	5.5	4.1
6	5.8	4.3
7	6.0	4.4
8	6.3	4.9
9	6.5	5.2
10	6.8	5.6
11	7.0	5.9
12	7.2	6.3
13	7.5	6.9
14	7.8	7.5
15	8.0	7.9
16	8.4	8.4
17	8.8	8.8
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

JZ Mock B

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Both papers combined

Total out of 40

Score	2017–23	2024+	Score	2017–23	2024+
0	1.0	1.0	21	6.9	5.7
1	2.6	2.0	22	7.0	5.9
2	3.4	2.6	23	7.1	6.1
3	3.9	3.0	24	7.3	6.5
4	4.2	3.2	25	7.4	6.7
5	4.5	3.4	26	7.5	6.9
6	4.7	3.6	27	7.6	7.1
7	4.9	3.7	28	7.8	7.5
8	5.1	3.8	29	7.9	7.7
9	5.3	4.0	30	8.1	8.1
10	5.5	4.1	31	8.2	8.2
11	5.6	4.2	32	8.4	8.4
12	5.8	4.3	33	8.6	8.6
13	5.9	4.4	34	8.8	8.8
14	6.0	4.4	35	9.0	9.0
15	6.2	4.7	36	9.0	9.0
16	6.3	4.9	37	9.0	9.0
17	6.4	5.0	38	9.0	9.0
18	6.5	5.2	39	9.0	9.0
19	6.6	5.3	40	9.0	9.0
20	6.8	5.6			

JZ Mock C

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Individual papers

Paper 1
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.1	2.3
2	3.9	3.0
3	4.5	3.4
4	4.9	3.7
5	5.2	3.9
6	5.5	4.1
7	5.8	4.3
8	6.0	4.4
9	6.3	4.9
10	6.5	5.2
11	6.8	5.6
12	7.0	5.9
13	7.3	6.5
14	7.6	7.1
15	7.9	7.7
16	8.2	8.2
17	8.6	8.6
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

Paper 2
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.3	2.5
2	4.1	3.1
3	4.6	3.5
4	5.0	3.8
5	5.3	4.0
6	5.6	4.2
7	5.9	4.4
8	6.2	4.7
9	6.5	5.2
10	6.7	5.5
11	7.0	5.9
12	7.3	6.5
13	7.5	6.9
14	7.8	7.5
15	8.1	8.1
16	8.5	8.5
17	8.9	8.9
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

JZ Mock C

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Both papers combined

Total out of 40

Score	2017–23	2024+	Score	2017–23	2024+
0	1.0	1.0	21	6.8	5.6
1	2.4	1.8	22	6.9	5.7
2	3.2	2.4	23	7.0	5.9
3	3.7	2.8	24	7.1	6.1
4	4.0	3.1	25	7.3	6.5
5	4.3	3.3	26	7.4	6.7
6	4.5	3.4	27	7.6	7.1
7	4.7	3.6	28	7.7	7.3
8	4.9	3.7	29	7.8	7.5
9	5.1	3.8	30	8.0	7.9
10	5.3	4.0	31	8.2	8.2
11	5.4	4.0	32	8.3	8.3
12	5.6	4.2	33	8.5	8.5
13	5.7	4.2	34	8.8	8.8
14	5.9	4.4	35	9.0	9.0
15	6.0	4.4	36	9.0	9.0
16	6.1	4.6	37	9.0	9.0
17	6.2	4.7	38	9.0	9.0
18	6.4	5.0	39	9.0	9.0
19	6.5	5.2	40	9.0	9.0
20	6.6	5.3			

JZ Mock D

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Individual papers

Paper 1
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.1	2.3
2	3.9	3.0
3	4.4	3.3
4	4.8	3.6
5	5.1	3.8
6	5.4	4.0
7	5.7	4.2
8	6.0	4.4
9	6.2	4.7
10	6.5	5.2
11	6.7	5.5
12	7.0	5.9
13	7.3	6.5
14	7.5	6.9
15	7.8	7.5
16	8.2	8.2
17	8.6	8.6
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

Paper 2
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.1	2.3
2	3.9	3.0
3	4.4	3.3
4	4.8	3.6
5	5.2	3.9
6	5.5	4.1
7	5.8	4.3
8	6.1	4.6
9	6.3	4.9
10	6.6	5.3
11	6.9	5.7
12	7.1	6.1
13	7.4	6.7
14	7.7	7.3
15	8.0	7.9
16	8.4	8.4
17	8.8	8.8
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

JZ Mock D

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Both papers combined

Total out of 40

Score	2017–23	2024+	Score	2017–23	2024+
0	1.0	1.0	21	6.7	5.5
1	2.3	1.7	22	6.8	5.6
2	3.1	2.3	23	6.9	5.7
3	3.5	2.7	24	7.1	6.1
4	3.9	3.0	25	7.2	6.3
5	4.2	3.2	26	7.3	6.5
6	4.4	3.3	27	7.5	6.9
7	4.6	3.5	28	7.6	7.1
8	4.8	3.6	29	7.8	7.5
9	5.0	3.8	30	7.9	7.7
10	5.2	3.9	31	8.1	8.1
11	5.3	4.0	32	8.3	8.3
12	5.5	4.1	33	8.5	8.5
13	5.6	4.2	34	8.7	8.7
14	5.8	4.3	35	8.9	8.9
15	5.9	4.4	36	9.0	9.0
16	6.0	4.4	37	9.0	9.0
17	6.2	4.7	38	9.0	9.0
18	6.3	4.9	39	9.0	9.0
19	6.4	5.0	40	9.0	9.0
20	6.6	5.3			

JZ Mock E

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Individual papers

Paper 1
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.7	2.8
2	4.5	3.4
3	5.0	3.8
4	5.3	4.0
5	5.7	4.2
6	5.9	4.4
7	6.2	4.7
8	6.4	5.0
9	6.6	5.3
10	6.8	5.6
11	7.0	5.9
12	7.3	6.5
13	7.5	6.9
14	7.7	7.3
15	8.0	7.9
16	8.3	8.3
17	8.7	8.7
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

Paper 2
out of 20

Score	2017–23	2024+
0	1.0	1.0
1	3.4	2.6
2	4.3	3.3
3	4.8	3.6
4	5.2	3.9
5	5.5	4.1
6	5.9	4.4
7	6.2	4.7
8	6.4	5.0
9	6.7	5.5
10	7.0	5.9
11	7.3	6.5
12	7.5	6.9
13	7.8	7.5
14	8.1	8.1
15	8.4	8.4
16	8.8	8.8
17	9.0	9.0
18	9.0	9.0
19	9.0	9.0
20	9.0	9.0

JZ Mock E

Implied boundaries — modelled, not official. Official 2017–23 scale, and estimated 2024+ equivalent.

Both papers combined

Total out of 40

Score	2017–23	2024+	Score	2017–23	2024+
0	1.0	1.0	21	7.0	5.9
1	2.8	2.1	22	7.1	6.1
2	3.6	2.7	23	7.3	6.5
3	4.0	3.1	24	7.4	6.7
4	4.4	3.3	25	7.5	6.9
5	4.6	3.5	26	7.6	7.1
6	4.9	3.7	27	7.8	7.5
7	5.1	3.8	28	7.9	7.7
8	5.3	4.0	29	8.1	8.1
9	5.4	4.0	30	8.2	8.2
10	5.6	4.2	31	8.4	8.4
11	5.8	4.3	32	8.5	8.5
12	5.9	4.4	33	8.7	8.7
13	6.0	4.4	34	8.9	8.9
14	6.2	4.7	35	9.0	9.0
15	6.3	4.9	36	9.0	9.0
16	6.4	5.0	37	9.0	9.0
17	6.5	5.2	38	9.0	9.0
18	6.7	5.5	39	9.0	9.0
19	6.8	5.6	40	9.0	9.0
20	6.9	5.7			