

Moderation Summary Report

Subject: Mathematics of Mechanics Level: Advanced Higher

This report summarises the context for moderation of the estimates received for this course, ie, historic attainment, the 2020 Starting Point Distributions and 2020 Estimates. It also provides the key outcomes of the moderation process for this course.

Full details of the moderation approach and the Attainment Statistics (August) 2020 can be found on SQA's statistics page (<https://www.sqa.org.uk/statistics>)¹.

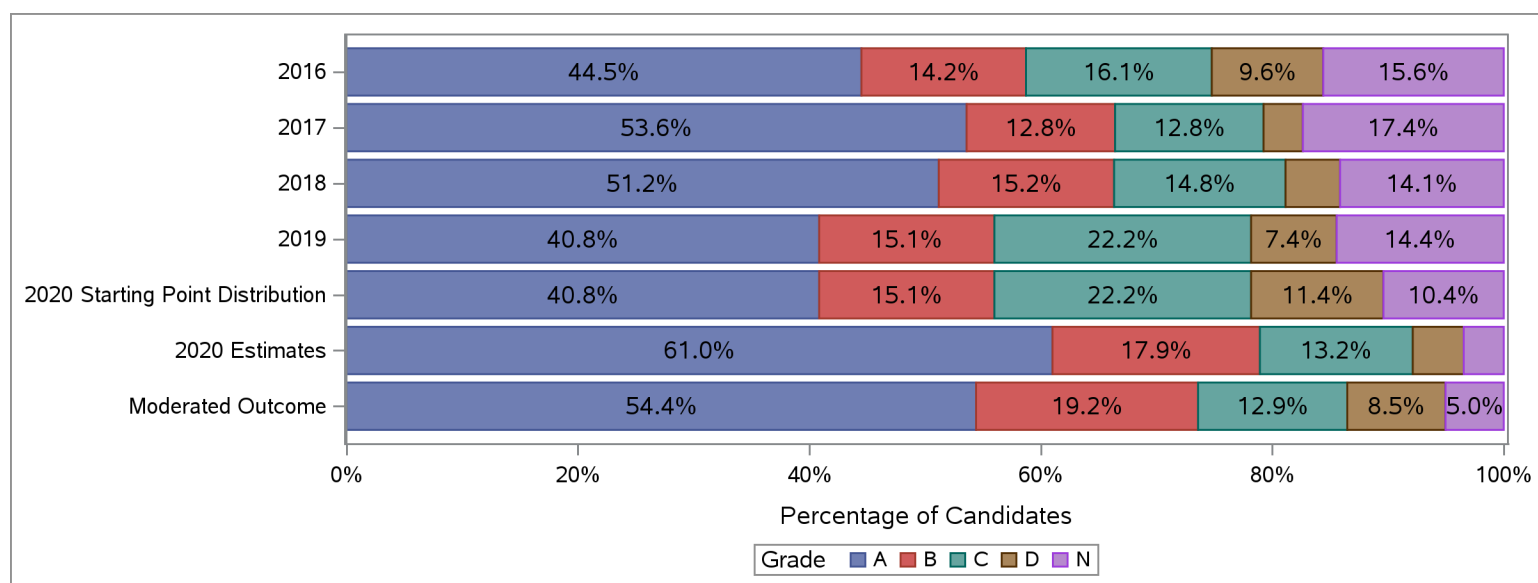
Furthermore, where small numbers of entries (values less than 5) could risk identification of individuals, those numbers and associated percentages have been suppressed in the tables below with an asterisk.

Historic Attainment, Starting Point Distribution, Estimates Received and Moderated Outcome

The table and chart below show:

- (a) historic attainment by grade for this course for years 2016 to 2019;
- (b) the Starting Point Distribution, which provides a projected distribution for 2020 attainment for this course, based on quantitative and qualitative analyses by SQA;
- (c) the distribution of 2020 estimates received from centres for this course (pre moderation); and
- (d) the distribution of grades after the moderation process.

Advanced Higher : Mathematics of Mechanics	Grade						Total	Grade					
	A	B	C	D	N	A		B	C	D	N		
	Number	Number	Number	Number	Number	%		%	%	%	%		
2016	97	31	35	21	34	218	44.5	14.2	16.1	9.6	15.6	100.0	
2017	142	34	34	9	46	265	53.6	12.8	12.8	3.4	17.4	100.0	
2018	152	45	44	14	42	297	51.2	15.2	14.8	4.7	14.1	100.0	
2019	116	43	63	21	41	284	40.8	15.1	22.2	7.4	14.4	100.0	
2020 Starting Point Distribution	130	48	71	36	33	318	40.8	15.1	22.2	11.4	10.4	100.0	
2020 Estimates	194	57	42	14	11	318	61.0	17.9	13.2	4.4	3.5	100.0	
Moderated Outcome	173	61	41	27	16	318	54.4	19.2	12.9	8.5	5.0	100.0	



¹Some of the figures in this summary report may differ slightly to figures in the Attainment Statistics (August) 2020 publication.

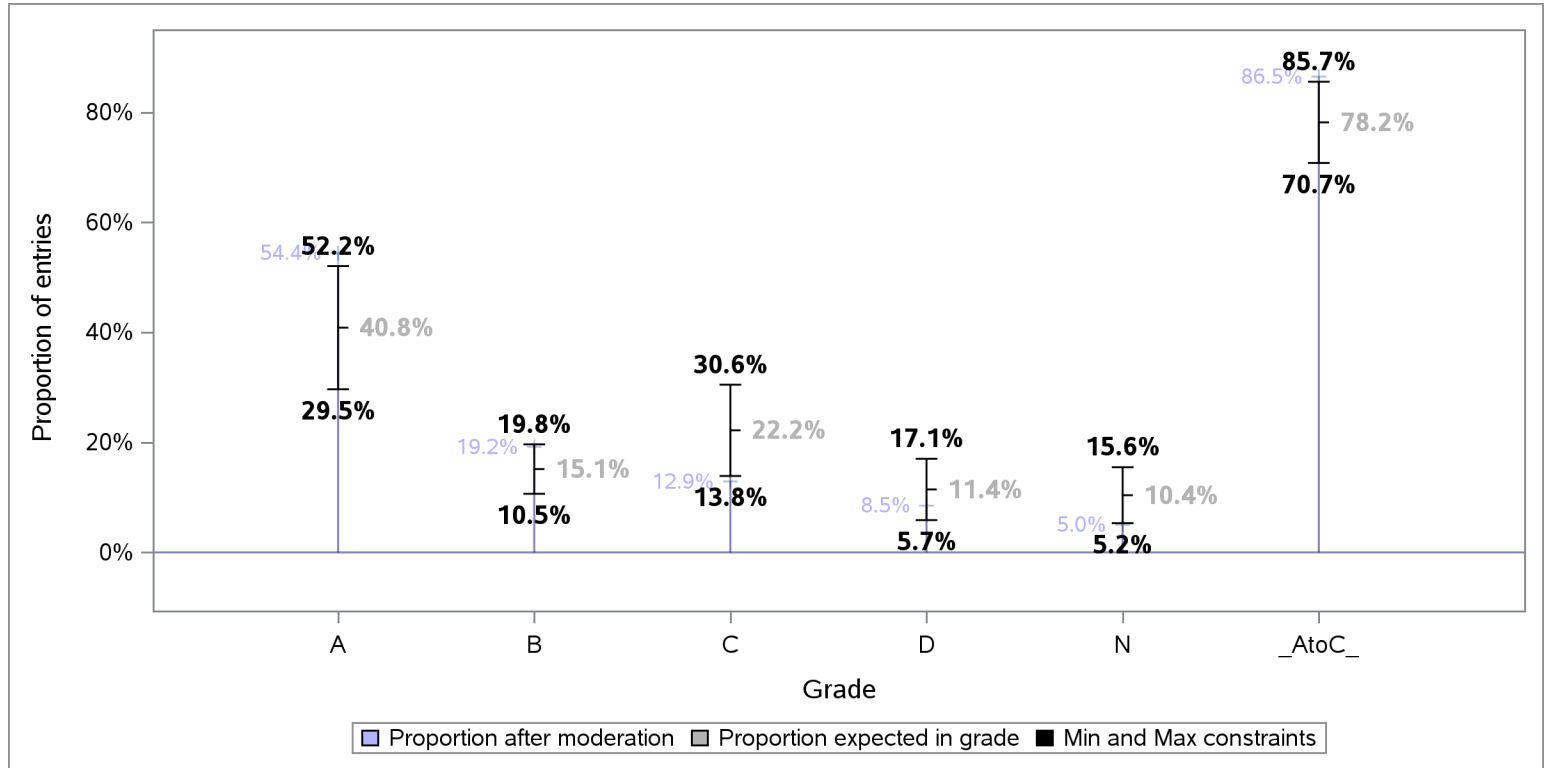
This is because the the Attainment Statistics (August) 2020 publication excludes those candidates who were removed after the moderation process, including candidates who have subsequently been withdrawn by their presenting centre.



Tolerance ranges for the Starting Point Distribution

To allow for year-on-year variability in attainment, tolerance ranges were derived for each projected grade proportion in the Starting Point Distribution, and the A to C rate. For each grade, the tolerance range is derived from the 90% confidence intervals for mean historic attainment from 2016 to 2019.

The chart below shows the projected proportion for each grade, as per the Starting Point Distribution, the tolerance range for each projected proportion and proportion per grade after the moderation process.



Redistribution of estimates by grade as a result of moderation

The table below shows the number and proportion of entries that were estimated for each grade, and how these were redistributed to other grades as a result of the moderation process.

Estimated Grade	Total Entries	Moderated Grade									
		A		B		C		D		N	
		Entries	% Entries	Entries	% Entries	Entries	% Entries	Entries	% Entries	Entries	% Entries
ALL	318	173	54.4	61	19.2	41	12.9	27	8.5	16	5.0
A	194	159	82.0	28	14.4	*	*	*	*	*	*
B	57	14	24.6	31	54.4	8	14.0	*	*	*	*
C	42	*	*	*	*	28	66.7	12	28.6	*	*
D	14	*	*	*	*	*	*	8	57.1	*	*
N	11	*	*	*	*	*	*	*	*	11	100.0



Centre Moderation Summary

As detailed in the SQA National Qualifications 2020 Awarding – Methodology Report, the moderation was undertaken at centre level. SQA did not adjust estimates for new centres presenting on this course, as there was no historical evidence on which to base adjustment. The table below provides key summary information about the centre moderation process and outcomes for this course.

Moderation Summary	Number	Percentage of Total
Entries for this course	318	100.0%
Centres presenting for this course	70	100.0%
New Centres	16	22.9%
Entries from New Centres	23	7.2%
Highest Entries Presented by a Centre	13	.
Median Entries Presented by Centres	4	.
Lowest Entries Presented by a Centre	1	.
Centres Adjusted	25	35.7%
Centres Not Adjusted	45	64.3%
Entries Adjusted	81	25.5%
Entries Adjusted Down	64	20.1%
Entries Adjusted Up	17	5.3%
Entries Adjusted Down by One Grade	53	16.7%
Entries Adjusted Up by One Grade	17	5.3%
Entries Adjusted Down by Two Grades	8	2.5%
Entries Adjusted Up by Two Grades	*	*
Entries Adjusted Down by Three Grades	*	*
Entries Adjusted Up by Three Grades	*	*
Entries Adjusted Down by Four Grades	*	*
Entries Adjusted Up by Four Grades	*	*
Entries Adjusted from A-C to D	19	6.0%
Entries Adjusted from A-C to N	*	*
Entries Adjusted from D to A-C	*	*
Entries Adjusted from N to A-C	*	*