Notional Component Grade Boundaries

Edexcel GCE AS/A Level (From 2015 and 2016)

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Understanding linear component raw marks and subject marks

Components of International GCSE and reformed GCSE, AS and A level qualifications are all sat at the end of the course. Components are individual assessments, such as examinations or non-exam assessments (NEA), which each make up a linear qualification. These qualifications are all linear rather than modular, which means that there is no longer a need for the UMS marks you will have been familiar with in the past.

The component structure of qualifications

In linear qualifications, each component has a total raw mark. The components contribute a certain percentage to the qualification mark overall, but the contribution of the components may not be equal. This is because one component may represent a larger part of the qualification than the others (see example 2, below). When the contribution of components to the qualification is not equal, the component raw marks, when simply added together, may not reflect the percentage contribution of the components to the qualification. In such cases the raw mark for the assessment is scaled up or down by a weighting factor. The raw mark is multiplied by the weighting factor so that it reflects the contribution of the component mark to the qualification.

The scaled marks, known as subject marks, are then added together to form the overall subject mark.

Two examples are given below.

Example 1: no scaling is needed as the total raw mark for each component reflects the percentage contribution of each to the qualification.

The total raw marks of all components in a linear qualification will add up to the total subject mark **if** they all contribute to the qualification equally.

Component Title	Raw Marks	Contribution to the Qualification	Weighting Factor	Total Scaled Mark
Paper 1	50	25%	1.000	50
Paper 2	50	25%	1.000	50
Paper 3	50	25%	1.000	50
Paper 4	50	25%	1.000	50
Subject max mark	200	100%		200

Example 2: scaling is needed as the raw mark for one or more components does not reflect the percentage contribution.

Component Title	Raw marks	Contribution to the qualification	Weighting Factor	Total Scaled mark
Paper 1	60	35%	1.458	87.5
Paper 2	45	20%	1.111	50
Paper 3	45	25%	1.389	62.5
Paper 4	50	20%	1.000	50
Subject max mark		100%		250

How candidates' grades are determined

Table 1 – candidates sitting the qualification in example 1

Component title	Marks for candidate A	Mark for candidate B
Paper 1	10	40
Paper 2	25	15
Paper 3	30	20
Paper 4	20	10
Subject mark	**85**	**85**

Since the marks for each component in the qualification represent the correct percentage contribution, the component marks are simply added to give the overall subject mark. In this example, both candidates A and B have achieved 85 marks for the overall subject. Since they both have the same subject mark, candidates A and B will receive the same grade even though their component performances are very different.

Suppose the subject grade boundaries were 81 marks for a grade C and 93 marks for a grade B. Since a subject mark of 85 lies within this mark range, both candidates A and B will receive a grade C for the qualification.

Table 2 – candidates sitting the qualification in example 2

Component title	Raw mark for candidate C	Weighting factor	Scaled mark
Paper 1	12	1.458	17.496
Paper 2	24	1.111	26.664
Paper 3	31	1.389	43.059
Paper 4	20	1.000	20.000
		Total:	107.219
		Subject mark:	**107**

Table 2 shows the performance of candidate C in the example 2 qualification. The second column, 'Raw mark', shows the marks achieved on each of the four papers. Since the marks for the components must be scaled to represent the percentage contribution of each paper to the overall subject, the component marks must be scaled, using the weighting factor shown in column 3, to give the scaled mark shown in column 4 of the table. The scaled marks are totalled to give 107.291 which is, as a final step, rounded to the nearest whole number to give the subject mark of 107.

Suppose the subject grade boundaries were 101 marks for a grade D and 115 marks for a grade C. Since a subject mark of 107 lies within this mark range, candidate C will receive a grade D for the qualification.

Please note that footnote 1, relating to the example 2 table, explains the need for the weighting factor and that the scaled marks are calculated to the third place of decimal.

The use of notional component grade boundaries

The above examples, showing the grades achieved by candidates A, B and C, illustrate that notional <u>grade</u> performance at component level plays no part in the determination of a qualification grade. In fact, table 1 shows that both candidates achieve the same subject mark even though their component performances are quite different. Given this, why are notional component grade boundaries published?

When the subject grade boundaries are recommended by the senior examiners, it helps them to consider the component performance for a candidate who will achieve, say, a borderline grade A by producing a borderline grade A performance on each component.

For teachers, the notional component grade boundaries can be useful as an indicator of grade performance when, for example, an examination paper is used as a future mock examination.

Linear qualifications and deciding whether to submit a post-results service (PRS) request

Component-level grade boundaries in these linear qualifications are notional only, and do not equate to a certificated grade.

When considering whether to submit a post-results service request, it is important to understand that notional grade boundaries - or how close a candidate may be to one - are not relevant.

A change in a notional component-level boundary may not equate to a subject grade change. For example, if a learner achieves Bs in each of the two components for a reformed AS level the component grade would be a B. If, after a review of marking, a component mark changes, and the notional grade increases from a B to an A, the overall AS subject grade may still remain a B when the component scores are combined*.

*if, when combined with the other component scores, the revised total equates to an A grade, the subject grade would be changed accordingly.

Arabic

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9AA0	A Level Arabic Paper 01	Raw	80	57	41	35	29	23	18	0
9AA0	A Level Arabic Paper 02	Raw	110	79	56	48	40	32	24	0
9AA0	A Level Arabic Paper 03	Raw	60	42	30	25	21	17	13	0

Art and Design (Fine Art)

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9FA0	A Level Art and Design (Fine Art) Paper 02	Raw	72	53	45	35	26	17	8	0

Art and Design (Photography)

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9PY0	A Level Art and Design (Photography) Paper 02	Raw	72	53	45	35	26	17	8	0

Art and Design (Textile Design)

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9TE0	A Level Art and Design (Textile Design) Paper 02	Raw	72	53	45	35	26	17	8	0

Art, Craft And Design

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9AD0	A Level Art, Craft And Design Paper 02	Raw	72	53	45	35	26	17	8	0

Biology A (Salters Nuffield)

AS notional component grade boundaries			Max Mark		A	B	C	D	E	U
8BN0	AS Biology A (Salters Nuffield) Paper 01	Raw	80		48	42	36	30	24	0
8BN0	AS Biology A (Salters Nuffield) Paper 02	Raw	80		48	42	36	30	24	0

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9BN0	A Level Biology A (Salters Nuffield) Paper 01	Raw	100	66	55	46	37	29	21	0
9BN0	A Level Biology A (Salters Nuffield) Paper 02	Raw	100	64	54	45	36	28	20	0
9BN0	A Level Biology A (Salters Nuffield) Paper 03	Raw	100	55	46	38	31	24	17	0

Biology B

AS notional component grade boundaries			Max Mark		A	B	C	D	E	U
8BI0	AS Biology B Paper 01	Raw	80		44	37	31	25	19	0
8BI0	AS Biology B Paper 02	Raw	80		43	37	31	25	19	0

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9BI0	A Level Biology B Paper 01	Raw	90	53	43	35	27	20	13	0
9BI0	A Level Biology B Paper 02	Raw	90	52	42	34	26	19	12	0
9BI0	A Level Biology B Paper 03	Raw	120	71	57	46	36	26	16	0

Business

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9BS0	A Level Business Paper 01	Raw	100	70	63	53	44	35	26	0
9BS0	A Level Business Paper 02	Raw	100	68	62	52	42	33	24	0
9BS0	A Level Business Paper 03	Raw	100	70	63	53	44	35	26	0

Chemistry

AS notional component grade boundaries			Max Mark		A	B	C	D	E	U
8CH0	AS Chemistry Paper 01	Raw	80		53	45	37	29	22	0
8CH0	AS Chemistry Paper 02	Raw	80		52	44	36	28	20	0

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9CH0	A Level Chemistry Paper 01	Raw	90	70	54	43	32	22	12	0
9CH0	A Level Chemistry Paper 02	Raw	90	68	51	40	30	20	10	0
9CH0	A Level Chemistry Paper 03	Raw	120	88	71	57	44	31	18	0

Chinese

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9CN0	A Level Chinese Paper 01	Raw	80	56	45	38	32	26	20	0
9CN0	A Level Chinese Paper 02	Raw	120	82	66	58	50	42	34	0

Design and Technology

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9DT0	A Level Design and Technology Paper 01	Raw	120	69	59	49	39	30	21	0

Drama and Theatre

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9DR0	A Level Drama and Theatre Paper 03	Raw	80	54	44	34	25	16	7	0

Economics A

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9EC0	A Level Economics A Paper 01	Raw	100	72	64	53	42	32	22	0
9EC0	A Level Economics A Paper 02	Raw	100	75	66	55	44	33	23	0
9EC0	A Level Economics A Paper 03	Raw	100	77	68	56	44	33	22	0

Economics B

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9EB0	A Level Economics B Paper 01	Raw	100	60	53	43	33	23	14	0
9EB0	A Level Economics B Paper 02	Raw	100	60	53	43	33	23	14	0
9EB0	A Level Economics B Paper 03	Raw	100	61	53	43	33	23	13	0

English Language

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9EN0	A Level English Language Paper 01	Raw	60	32	27	23	19	15	12	0
9EN0	A Level English Language Paper 02	Raw	45	29	25	21	17	13	10	0
9EN0	A Level English Language Paper 03	Raw	45	28	25	21	17	13	10	0

English Language & Literature

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9EL0	A Level English Language & Literature Paper 01	Raw	50	36	31	26	22	18	14	0
9EL0	A Level English Language & Literature Paper 02	Raw	50	35	31	26	22	18	14	0

English Literature

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9ET0	A Level English Literature Paper 01	Raw	60	40	35	29	23	17	11	0
9ET0	A Level English Literature Paper 02	Raw	40	27	23	19	15	11	8	0
9ET0	A Level English Literature Paper 03	Raw	60	39	34	28	22	17	12	0

French

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9FR0	A Level French Paper 01	Raw	80	54	41	33	25	17	10	0
9FR0	A Level French Paper 02	Raw	120	81	62	50	38	26	15	0

Further Mathematics

AS notional component grade boundaries		Max Mark		A	B	C	D	E	U
8FM0	AS Further Mathematics Paper 01	Raw	80	42	34	26	18	10	0
8FM0	AS Further Mathematics Paper 021	Raw	40	22	18	14	11	8	0
8FM0	AS Further Mathematics Paper 023	Raw	40	24	20	16	13	10	0
8FM0	AS Further Mathematics Paper 025	Raw	40	21	18	15	12	9	0
8FM0	AS Further Mathematics Paper 026	Raw	40	20	17	14	12	10	0
8FM0	AS Further Mathematics Paper 027	Raw	40	21	17	14	11	8	0
8FM0	AS Further Mathematics Paper 028	Raw	40	20	16	13	10	7	0

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9FM0	A Level Further Mathematics Paper 01	Raw	75	51	42	33	24	15	6	0
9FM0	A Level Further Mathematics Paper 02	Raw	75	49	39	30	22	14	6	0
9FM0	A Level Further Mathematics Paper 3A	Raw	75	53	41	32	23	15	7	0
9FM0	A Level Further Mathematics Paper 3B	Raw	75	52	43	34	25	16	7	0
9FM0	A Level Further Mathematics Paper 3C	Raw	75	57	44	35	26	17	9	0
9FM0	A Level Further Mathematics Paper 3D	Raw	75	49	40	32	24	16	8	0
9FM0	A Level Further Mathematics Paper 4A	Raw	75	50	41	32	24	16	8	0
9FM0	A Level Further Mathematics Paper 4B	Raw	75	58	46	36	26	17	8	0
9FM0	A Level Further Mathematics Paper 4C	Raw	75	62	47	37	27	18	9	0
9FM0	A Level Further Mathematics Paper 4D	Raw	75	51	39	30	21	13	5	0

Geography

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9GE0	A Level Geography Paper 01	Raw	105	71	63	51	40	29	18	0
9GE0	A Level Geography Paper 02	Raw	105	71	63	51	40	29	18	0
9GE0	A Level Geography Paper 03	Raw	70	48	42	34	26	19	12	0

German

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9GN0	A Level German Paper 01	Raw	80	57	40	32	25	18	11	0
9GN0	A Level German Paper 02	Raw	120	83	60	48	37	26	15	0

History

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9HI0	A Level History Paper 1A	Raw	60	47	42	34	27	20	13	0
9HI0	A Level History Paper 1C	Raw	60	45	40	33	27	21	15	0
9HI0	A Level History Paper 1D	Raw	60	47	42	35	28	21	14	0
9HI0	A Level History Paper 1E	Raw	60	48	42	35	29	23	17	0
9HI0	A Level History Paper 1F	Raw	60	46	41	35	29	23	17	0
9HI0	A Level History Paper 1G	Raw	60	47	42	36	30	24	18	0
9HI0	A Level History Paper 1H	Raw	60	46	40	33	27	21	15	0
9HI0	A Level History Paper 2A	Raw	40	32	28	23	18	13	8	0
9HI0	A Level History Paper 2C	Raw	40	31	27	23	19	15	11	0
9HI0	A Level History Paper 2D	Raw	40	32	28	23	18	14	10	0
9HI0	A Level History Paper 2E	Raw	40	30	27	23	19	15	11	0
9HI0	A Level History Paper 2F	Raw	40	31	27	23	19	15	12	0
9HI0	A Level History Paper 2G	Raw	40	31	27	23	19	16	13	0
9HI0	A Level History Paper 2H	Raw	40	29	26	22	18	14	10	0
9HI0	A Level History Paper 30	Raw	60	45	40	33	26	19	13	0
9HI0	A Level History Paper 31	Raw	60	45	40	34	28	22	16	0
9HI0	A Level History Paper 33	Raw	60	44	39	33	27	21	16	0
9HI0	A Level History Paper 34	Raw	60	45	40	33	27	21	15	0
9HI0	A Level History Paper 35	Raw	60	45	40	34	28	22	16	0
9HI0	A Level History Paper 36	Raw	60	45	40	33	26	20	14	0
9HI0	A Level History Paper 37	Raw	60	46	41	34	27	20	13	0
9HI0	A Level History Paper 38	Raw	60	43	38	31	24	18	12	0
9HI0	A Level History Paper 39	Raw	60	43	38	32	26	20	14	0

History of Art

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9HT0	A Level History of Art Paper 01	Raw	110	72	56	45	35	25	15	0
9HT0	A Level History of Art Paper 02	Raw	110	71	56	45	34	24	14	0

Italian

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9IN0	A Level Italian Paper 01	Raw	80	75	63	52	42	32	22	0
9IN0	A Level Italian Paper 02	Raw	120	75	63	52	42	32	22	0

Japanese

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9JA0	A Level Japanese Paper 01	Raw	80	57	41	35	29	23	18	0
9JA0	A Level Japanese Paper 02	Raw	110	79	56	48	40	32	24	0
9JA0	A Level Japanese Paper 03	Raw	60	42	30	25	21	17	13	0

Mathematics

AS notional component grade boundaries			Max Mark		A	B	C	D	E	U
8MA0	AS Mathematics Paper 01	Raw	100		57	47	37	27	18	0
8MA0	AS Mathematics Paper 02	Raw	60		34	29	24	19	14	0

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9MA0	A Level Mathematics Paper 01	Raw	100	71	54	44	34	24	14	0
9MA0	A Level Mathematics Paper 02	Raw	100	71	54	44	34	24	14	0
9MA0	A Level Mathematics Paper 03	Raw	100	65	49	40	31	22	14	0

Music

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9MU0	A Level Music Paper 03	Raw	100	52	39	32	25	18	12	0

Persian

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9PN0	A Level Persian Paper 01	Raw	80	57	41	35	29	23	18	0
9PN0	A Level Persian Paper 02	Raw	110	79	56	48	40	32	24	0
9PN0	A Level Persian Paper 03	Raw	60	42	30	25	21	17	13	0

Physical Education

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9PE0	A Level Physical Education Paper 01	Raw	140	70	60	50	40	30	20	0
9PE0	A Level Physical Education Paper 02	Raw	100	48	42	35	28	21	15	0

Physics

AS notional component grade boundaries		Max Mark		A	B	C	D	E	U
8PH0	AS Physics Paper 01	Raw	80		39	33	28	23	18	0
8PH0	AS Physics Paper 02	Raw	80		38	33	28	23	18	0

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9PH0	A Level Physics Paper 01	Raw	90	56	46	38	31	24	17	0
9PH0	A Level Physics Paper 02	Raw	90	56	46	38	31	24	17	0
9PH0	A Level Physics Paper 03	Raw	120	74	61	52	43	35	27	0

Politics

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9PL0	A Level Politics Paper 01	Raw	84	55	47	38	30	22	14	0
9PL0	A Level Politics Paper 02	Raw	84	56	48	39	30	21	13	0
9PL0	A Level Politics Paper 3A	Raw	84	54	46	37	29	21	13	0
9PL0	A Level Politics Paper 3B	Raw	84	61	53	44	36	28	20	0

Portuguese

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9PG0	A Level Portuguese Paper 01	Raw	80	57	41	35	29	23	18	0
9PG0	A Level Portuguese Paper 02	Raw	110	79	56	48	40	32	24	0
9PG0	A Level Portuguese Paper 03	Raw	60	42	30	25	21	17	13	0

Psychology

A level notional component grade boundaries		Max Mark	A*	A	B	C	D	E	U
9PS0	A Level Psychology Paper 01	Raw	90	50	43	36	29	22	16	0
9PS0	A Level Psychology Paper 02	Raw	90	48	41	34	27	20	14	0
9PS0	A Level Psychology Paper 03	Raw	80	45	38	30	23	16	9	0

Religious Studies

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9RS0	A Level Religious Studies Paper 01	Raw	80	65	56	46	36	26	17	0
9RS0	A Level Religious Studies Paper 02	Raw	80	68	60	50	40	30	20	0
9RS0	A Level Religious Studies Paper 03	Raw	80	70	61	50	40	30	20	0
9RS0	A Level Religious Studies Paper 4B	Raw	80	64	55	45	35	25	16	0
9RS0	A Level Religious Studies Paper 4D	Raw	80	69	60	49	38	27	16	0

Russian

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9RU0	A Level Russian Paper 01	Raw	80	61	41	33	25	17	9	0
9RU0	A Level Russian Paper 02	Raw	120	63	42	33	25	17	9	0

Spanish

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9SP0	A Level Spanish Paper 01	Raw	80	55	45	36	27	18	9	0
9SP0	A Level Spanish Paper 02	Raw	120	90	73	57	41	26	11	0

Statistics

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9ST0	A Level Statistics Paper 01	Raw	80	61	52	43	34	25	16	0
9ST0	A Level Statistics Paper 02	Raw	80	60	51	42	33	24	16	0
9ST0	A Level Statistics Paper 03	Raw	80	61	51	42	33	24	15	0

Turkish

A level notional component grade boundaries			Max Mark	A*	A	B	C	D	E	U
9TU0	A Level Turkish Paper 01	Raw	80	57	41	35	29	23	18	0
9TU0	A Level Turkish Paper 02	Raw	110	79	56	48	40	32	24	0
9TU0	A Level Turkish Paper 03	Raw	60	42	30	25	21	17	13	0

Urdu											
A level notional component grade boundaries			**Max Mark**	**A***	**A**	**B**	**C**	**D**	**E**	**U**
9UR0	A Level Urdu Paper 01	Raw	80	57	41	35	29	23	18	0
9UR0	A Level Urdu Paper 02	Raw	110	78	56	48	40	32	24	0
9UR0	A Level Urdu Paper 03	Raw	60	42	30	25	21	17	13	0