

Notional Component Grade Boundaries

Edexcel International GCSE (9-1) qualifications

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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 grade 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.

Accour	nting												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4AC1	Accounting	Raw	100	85	77	70	62	55	48	38	28	19	0
	Paper 01												
4AC1	Accounting	Raw	50	42	38	35	31	27	24	19	14	10	0
	Paper 02												

Arabic	(First Language)												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4AA1	Arabic (First Language)	Raw	75	53	50	47	43	39	36	29	22	16	0
	Paper 01												
4AA1	Arabic (First Language)	Raw	50	46	43	41	38	36	34	27	21	15	0
	Paper 02												

Biolog	у												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4BI1	Biology	Raw	110	88	78	68	59	50	41	33	25	18	0
	Paper 1B												
4BI1	Biology	Raw	110	89	79	69	61	54	47	38	29	21	0
	Paper 1BR												
4BI1	Biology	Raw	70	47	41	36	31	27	23	19	15	12	0
	Paper 2B												
4BI1	Biology	Raw	70	47	41	36	32	28	25	22	19	16	0
	Paper 2BR												

Chemis	stry												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4CH1	Chemistry	Raw	110	103	94	85	75	65	56	46	36	27	0
	Paper 1C												
4CH1	Chemistry	Raw	110	96	87	79	70	61	52	43	34	25	0
	Paper 1CR												
4CH1	Chemistry	Raw	70	63	57	52	46	41	36	29	22	16	0
	Paper 2C												
4CH1	Chemistry	Raw	70	59	54	49	43	37	32	26	20	15	0
	Paper 2CR												

Comme	erce												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4CM1	Commerce	Raw	80	44	39	35	31	27	24	20	16	13	0
	Paper 01												
4CM1	Commerce	Raw	80	48	43	39	34	29	25	21	17	13	0
-	Paper 02												

Econor	mics												
Notiona	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4EC1	Economics	Raw	80	55	49	44	40	37	34	28	23	18	0
	Paper 01												
4EC1	Economics	Raw	80	55	49	44	40	36	32	27	22	17	0
	Paper 02												
4EC1	Economics	Raw	80	57	51	46	42	39	36	30	24	18	0
	Paper 01R												
4EC1	Economics	Raw	80	55	49	44	41	38	35	29	23	17	0
	Paper 02R												

English	n as a Second Language												
Notiona	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4ES1	English as a Second Language	Raw	100	97	90	84	77	70	63	56	50	44	0
	Paper 01												
4ES1	English as a Second Language	Raw	40	38	35	33	31	29	27	22	18	14	0
	Paper 02												
4ES1	English as a Second Language	Raw	100	97	90	84	77	70	63	56	50	44	0
	Paper 01R												
4ES1	English as a Second Language	Raw	40	38	35	33	31	29	27	22	18	14	0
	Paper 02R												

English	n Language A												
Notiona	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4EA1	English Language A	Raw	90	75	68	62	56	51	46	34	23	12	0
	Paper 01												
4EA1	English Language A	Raw	90	70	64	58	53	48	43	32	22	12	0
	Paper 01R												
4EA1	English Language A	Raw	60	43	39	36	31	26	22	16	11	6	0
	Paper 02												
4EA1	English Language A	Raw	60	43	39	36	31	27	23	17	11	6	0
	Paper 02R												
4EA1	English Language A	Raw	60	52	47	43	38	33	28	22	17	12	0
	Paper 03												
4EA1	English Language A	Raw	60	52	47	43	38	33	28	22	17	12	0
	Paper 03T												

Englis	h Language B												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4EB1	English Language B Paper 01	Raw	100	78	71	64	60	56	53	40	27	15	0
4EB1	English Language B Paper 01R	Raw	100	76	69	62	59	56	53	40	27	15	0

English	h Literature												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4ET1	English Literature	Raw	90	68	62	56	50	44	38	28	18	9	0
	Paper 01												
4ET1	English Literature	Raw	90	68	62	56	50	44	38	28	18	9	0
	Paper 01R												
4ET1	English Literature	Raw	60	46	42	38	33	29	25	18	11	5	0
	Paper 02												
4ET1	English Literature	Raw	60	46	42	38	33	29	25	18	11	5	0
	Paper 02R												
4ET1	English Literature	Raw	60	51	46	42	37	33	29	22	15	8	0
	Paper 03												
4ET1	English Literature	Raw	60	51	46	42	37	33	29	22	15	8	0
	Paper 03T												

Further	Pure Mathematics												
Notiona	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4PM1	Further Pure Mathematics	Raw	100	90	82	74	60	46	33	26			0
	Paper 01												
4PM1	Further Pure Mathematics	Raw	100	91	83	75	61	48	35	28			0
	Paper 02												
4PM1	Further Pure Mathematics	Raw	100	93	84	76	62	49	36	29			0
	Paper 01R												
4PM1	Further Pure Mathematics	Raw	100	93	84	76	62	48	34	27			0
	Paper 02R												

Humar	n Biology												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4HB1	Human Biology	Raw	90	75	70	65	59	54	49	41	33	25	0
	Paper 01												
4HB1	Human Biology	Raw	90	74	69	64	58	52	47	39	31	24	0
	Paper 02												

Mathen	natics A												
Notion	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4MA1	Mathematics A (Foundation)	Raw	100					73	59	43	27	12	0
	Paper 1F												
4MA1	Mathematics A (Foundation)	Raw	100					68	55	40	26	12	0
	Paper 1FR												
4MA1	Mathematics A (Foundation)	Raw	100					75	61	44	28	12	0
	Paper 2F												
4MA1	Mathematics A (Foundation)	Raw	100					70	57	42	27	13	0
	Paper 2FR							-					
4MA1	Mathematics A (Higher)	Raw	100	81	67	53	42	31	21	16			0
	Paper 1H												
4MA1	Mathematics A (Higher)	Raw	100	78	64	51	40	30	20	15			0
	Paper 1HR												
4MA1	Mathematics A (Higher)	Raw	100	78	64	51	40	30	20	15			0
	Paper 2H												
4MA1	Mathematics A (Higher)	Raw	100	80	66	52	41	31	21	16			0
	Paper 2HR												

Mathen	natics B												
Notiona	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4MB1	Mathematics B	Raw	100	81	70	59	48	37	26	20			0
	Paper 01												
4MB1	Mathematics B	Raw	100	81	70	59	48	37	27	22			0
	Paper 01R												
4MB1	Mathematics B	Raw	100	81	70	59	48	37	26	20			0
	Paper 02												
4MB1	Mathematics B	Raw	100	80	69	58	47	36	25	19			0
	Paper 02R												

Physics	s												
Notiona	al component grade boundaries		Max Mark	9	8	7	6	5	4	3	2	1	U
4PH1	Physics	Raw	110	93	84	76	69	63	57	46	35	24	0
	Paper 1P												
4PH1	Physics	Raw	110	92	83	75	69	64	59	47	36	25	0
	Paper 1PR												
4PH1	Physics	Raw	70	56	51	46	40	35	30	25	20	16	0
	Paper 2P												
4PH1	Physics	Raw	70	55	50	45	40	36	32	26	20	15	0
	Paper 2PR												

Notion	al component grade boundaries		Max Mark	99	98	88	87	77	76	66	65	55	54
4SD0	Science (Double Award) Paper 1B	Raw	110	82	78	75	72	68	63	58	53	49	45
				44	43	33	32	22	21	11			U
		Raw		41	37	33	29	25	21	18			0
Notion	al component grade boundaries		Max Mark	99	98	88	87	77	76	66	65	55	54
4SD0	Science (Double Award) Paper 1BR	Raw	110	84	80	77	74	69	65	61	57	54	51
				44	43	33	32	22	21	11			U
		Raw		47	42	37	33	29	25	21			0
Notion	al component grade boundaries		Max Mark	99	98	88	87	77	76	66	65	55	54
4SD0	Science (Double Award) Paper 1C	Raw	110	103	98	94	90	85	80	75	70	66	62
				44	43	33	32	22	21	11		54 55 66 55 60	U
		Raw		56	51	46	41	36	31	27			0
Notion	al component grade boundaries		Max Mark	99	98	88	87	77	76	66	65	55	54
4SD0	Science (Double Award) Paper 1CR	Raw	110	96	91	87	83	79	74	69	64	60	56
				44	43	33	32	22	21	11		55 54 55 66 55 60	U
		Raw		52	47	42	38	33	29	25			0
Notion	al component grade boundaries		Max Mark	99	98	88	87	77	76	66	65	55	54
4SD0	Science (Double Award) Paper 1P	Raw	110	92	88	84	80	76	72	68	64	61	58
				44	43	33	32	22	21	11			U
		Raw		57	51	45	40	34	29	24			0
			Max Mark	99	98	88	87	77	76	66	65	55	54
Notion	al component grade boundaries												
Notion 4SD0	al component grade boundaries Science (Double Award) Paper 1PR	Raw	110	91	87	83	79	75	72	69	66	64	62
	Science (Double Award)	Raw		91 44 59	87 43 53	83 33 47	79 32 41	75 22	72 21 30	69 11	66	64	62 U