



GCSE MARKING SCHEME

SUMMER 2025

**GCSE
MATHEMATICS – COMPONENT 1
(FOUNDATION TIER)
C300U10-1**

About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

EDUQAS GCSE MATHEMATICS

SUMMER 2025 MARK SCHEME

GCSE (9-1) Mathematics Component 1: Foundation Tier	Mark	Comment
1.(a) 18	B1	
1.(b) 500 or 5 hundred(s)	B1	Accept hundred(s). Do not accept 100 or 23 500.
1.(c) 1, 2, 4, 5, 10 and 20	B2	Written in any order. Ignore repeats. Allow 1×20 , 2×10 and 4×5 . B1 for one of the following: 4 correct factors with none incorrect 5 correct with no more than one incorrect 6 correct with one incorrect.
1.(d) 700 or 680 or 721	B1	
1.(e) No indicated, with numbers listed: 745, 746, 747, 748, 749, (750) 751, 752, 753, 754	B1	Allow No indicated and one of the following: 'there are nine'. 'there are ten' if 750 appropriately seen. 'all the numbers between 745 and 754 round to 750'. Do not accept an unsupported 'there are more than eight'.
	(6)	
2. $\frac{241 + 195}{2} - 195$ OR $241 - \frac{241 + 195}{2}$ OR $\frac{241 - 195}{2}$ 23 (counters)	M2 A1	May be seen in stages. M1 for either: $\frac{241 + 195}{2} (= 218)$ $241 - 195 (= 46)$ CAO
2. <u>Alternative method</u> <i>A series of trials which would lead to the correct answer (218 for each)</i> 23 (counters)	M2 A1	M1 for a pair of improving trials. CAO
	(3)	

7.(a)(i) 347	B1	
7.(a)(ii) 9	B1	Accept embedded answers unless contradicted.
7.(b) ($x =$) 8	B2	May be seen on number machine. Accept embedded answers unless contradicted, e.g. • $60/5 + 8 = 20$. • $12 + 8 = 20$ B1 for one of the following: • $20 - x = 12$ • $12 + x = 20$ • $20 - \frac{60}{5}$ • $20 - \text{'their } \frac{60}{5}$, correctly evaluated
	(4)	
8.(a) $3a + 4b$	B2	Mark final answer. Must be an expression for B2. B1 for either: • sight of $(+)3a$ • sight of $4b$ (but not $-4b$) B0 for an <u>unsupported</u> $7ab$.
8.(b) ($w =$) 16	B1	Allow an embedded answer unless contradicted.
8.(c) 42	B2	B1 for sight of one of the following: • -8 (but not $-8x$) • 50 (but not $50y$) • $2 \times -4 + 5 \times 10$ • $2(-4) + 5(10)$ • an unsupported 58
8.(d) $n - 3$	B1	Mark final answer. B0 for $n = n - 3$.
	(6)	

9.(a) ($24 \div 4 =$) 6 $24 \div 12 \times 5 (= 10)$ (Hours left $=$) $24 - 6 - 10 (-3 - 4)$ oe OR (Hours used $=$) $6 + 10 + 3 (+4)$ Correct conclusion e.g. • '5 hours (left so more than 4 hours)' • '5 hours (left so enough time)' • '7 hours left so enough time for the gym and homework' • 'only adds to 19 (hours so enough time for homework)' • '23 hours (so one hour spare)' • '(Yes, with) one hour spare'	B1 B1 M1 A1	Dependent on B1 previously awarded. 'FT their 10' if $24 \div 12 \times 5$ incorrectly evaluated. CAO
<u>Alternative method</u> $1/4 = 6/24$ $5/12 = 10/24$ $6/24 + 10/24 + 3/24 (=19/24)$ OR $6/24 + 10/24 + 3/24 + 4/24 (=23/24)$ OR $24/24 - 6/24 - 10/24 - 3/24 (=5/24)$ Correct conclusion	B1 B1 M1 A1	Dependent on at least one B1 previously awarded. CAO. Allow 23/24.
9.(b) Suitable criticism e.g. • 'the (vertical) scale is not uniform' • 'time doesn't increase in equal amounts' • '(the axis) goes up in 10s and then 5s' • '5 is missing' • '15 is missing'	E1	Do not allow • 'the scale is wrong' • 'it should go up in 10s' • 'it should go up in 5s' • 'there are arrows missing on the axis'
	(5)	
10. 3, 6, 8, 8 in any order	B3	There must be 4 numbers otherwise B0. Numbers in boxes take precedence. B2 for satisfying 2 of the 3 conditions. B1 for satisfying 1 of the 3 conditions. Conditions to check: Mode 8, Median, 7, Range 5.
	(3)	

11.(a)		
72 (km)	B1	± 1.6 km
105(°)	B1	$\pm 2^\circ$
11.(b)		<u>Overlay</u> Allow unambiguous indication for C. e.g. the end of the line
Point C 6 cm from B	B1	± 2 mm
Point C on a bearing of 240° from B	B1	$\pm 2^\circ$
11.(c) 090(°)	B1	Do not accept 90(°)
	(5)	
12. (Tram arrives at) 13:33 or 1:33(p.m.)	B3	Answer space takes precedence for B3. B2 for one of the following: • using the tram that leaves at 12:48 to get their final answer. • a final answer of 12:48. • 12:93 (arrival time in incorrect format) • arrives 7 minutes early (before 13:40) • a final answer of (0)1:33a.m or 01:33. • a final answer of 12:57, 13:09 or 13:21 • FT 'their derived 12:48' provided the tram arrives between 13:28 and 13:40 inclusive. B1 for one of the following: • (tram leaves before) 12:55 • FT 'their derived 12:48' provided the tram arrives before 13:40. • appropriate sight of 12:45. • a final answer of 1:09(a.m.) or 1:21(a.m.)
	(3)	
13.(a) $\frac{9}{4}$ OR $2\frac{1}{4}$	B2	Mark final answer. B1 for one of the following: • sight of $\frac{27}{12}$ • a final answer of 2:25 or $2\frac{3}{12}$ • a correct answer for B2 spoilt by further working. If no marks, award SC1 for an answer of $\frac{4}{9}$.

13.(b)(i) 2	B1	
13.(b)(ii) 1 or 8	B1	Allow 1 and 8.
13.(b)(iii) 20	B1	Allow $20 \times 20 (= 400)$ or $20^2 (= 400)$
	(5)	
14. (Probability of winning) = $\frac{7}{20}$ o.e (Number of winners =) $\frac{7}{20} \times 80$ = 28 (Profit =) $80 \times 1.5(0) - 28 \times 3$ (= 120 - 84) = (£)36	B1 M1 A1 M1 A2	 FT 'their $\frac{7}{20}$ ' provided <1 and $\neq \frac{1}{4}$ or $\frac{1}{2}$ Implies B1. Allow $\frac{28}{80}$. FT FT 'their derived number of winners' if less than 80. Must be a whole number. FT A1 for either (£)120 or (£)84 If no marks, award SC1 for $(80 \times 1.5 =)120$.
<u>Alternative method for last three marks</u> (28 winners receive the money paid by 56 people so profit =) $(80 - 2 \times 28) \times 1.5(0)$ = (£)36	M1 A2	 FT 'their derived/stated number of winners' if less than 80. Must be a whole number. FT
<u>Alternative method</u> (Number of winning balls = $20 - 13 =$) 7 (Prize money paid to 20 players =) 7×3 (=£21) (Profit made from 20 players =) $20 \times 1.5(0) - 7 \times 3$ (= £9) (Profit made from 80 players = (£) $9 \times 4 =$) (£)36	 M4 m1 A1	 If no marks, award - SC5 for a final answer of (£)48 from the use of 6 winning balls. - SC3 for an intermediate answer of (£)12 from the use of 6 winning balls (for 20 players). They may or may not continue afterwards.
	(6)	

15.(a) 30 (minutes)	B1	Accept 0.5 hours
15.(b)(i) Straight lines drawn between: • (11:15, 25) and (12:45, 25) (12:45, 25) and (13:15, 0).	B1 B1	Mark intention. FT 'their 12:45' provided < 13:15.
15.(b)(ii) (speed =) $\frac{25}{0.5}$ oe or $25 \div 0.5$ oe 50 (miles per hour)	M1 A1	FT 'their 0.5' provided 'their 12:45' < 13:15 and $\neq 1$ hour. FT
	(5)	
16.(a) $\frac{480}{7+5} \times 7$ OR $\frac{480 \times 5}{7+5}$ £280 AND £200	M1 A1	 Allow in any order. Allow (£)280 : (£)200 or (£)200 : (£)280. Sight of (£)280 or (£)200 implies M1.
16.(b) $\frac{42}{300} (\times 100)$ oe OR $42 \div 3$ 14 (%)	M1 A1	Must be a complete equivalent method e.g. $100\% = 300$, $10\% = 30$, $1\% = 3$ $30 \div 3 = 10$, $10 \div 10 = 1$ $10\% + 1\% + 1\% + 1\% + 1\%$ M1 A0 for a final answer of $\frac{14}{100}$ or 0.14.
	(4)	
17.(a) • $7 \times \frac{2}{3}$ • $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3}$ • 7×0.66 oe OR 7×0.67 oe OR $7 \times 0.\dot{6}$ oe OR 7×0.7 oe • $\frac{14}{3}$ • $4\frac{2}{3}$ • 4.62 OR 4.69 OR $4.\dot{6}$ OR 4.9 5 (tins)	M1 A1 B1	May be calculated using diagrams. '2 tins for 3 days' implies M1. '4 tins for 6 days' implies M1 A1. Strict F.T. 'their $\frac{14}{3}$ ' rounded up, provided M1 awarded. Sight of 5 tins does not imply M1 A1. An unsupported 5 (tins) scores B1 only.
17.(b) 3 : 17	B2	B1 for one of the following: • a final answer of 17 : 3 • sight of 15 : 85 (except 15% : 85%) • correct <u>simplification</u> of their 15 : x where $x > 15$ and $x < 100$. Must require full simplification. • a final answer of 3% : 17% • an equivalent ratio to 15 : 85 – possibly non-integer e.g. 0.15 : 0.85.
	(5)	

18.(a) -4 5 11	B2	B2 for all 3 values. B1 for 2 correct values. Table takes precedence if conflicting values given.
18.(b) A correct line drawn from (-2, -4) to (3, 11).	B2	B1 for either: - the correct line drawn but not over the full domain - for 5 points (FT) plotted correctly and up to 1 incorrect.
	(4)	
19.(a) $\frac{10}{10+8+7} (\times 100) - \frac{7}{10+8+7} (\times 100)$ oe $= 40\% - 28\% = 12\%$ OR $\frac{10-7}{10+8+7} (\times 100)$ oe $= \frac{3}{25} = 12\%$ OR $\frac{100}{10+8+7} \times (10-7)$ oe $= \frac{100}{25} \times 3 = 12\%$ (4×3)	B2	May be seen in stages. Must be convincing. Provided no incorrect work seen. B1 for one of the following: $\frac{10}{10+8+7} (\times 100)$ oe 40% $\frac{7}{10+8+7} (\times 100)$ oe 28% $\frac{10-7}{10+8+7} (= \frac{3}{25})$
<u>Alternative method</u> 7 : 8 : 10 = 28(%) : 32(%) : 40(%) 40(%) - 28(%) = 12% oe	B2	B1 for 7 : 8 : 10 = 28(%) : 32(%) : 40(%)
<u>Alternative method 2</u> 7 + 8 + 10 = 25 (hours) 100% = 25 (hours) 10% = 2.5 (hours) 1% = 0.25 (hours) 12% = 2.5 + 0.25 + 0.25 = 3 (hours) oe	B2	
19.(b) $\frac{70}{1+2+0.5} \times 2$ oe OR $\frac{70}{2+4+1} \times 4$ oe OR (£)10, (£)20, (£)40 in any order (may be seen as a ratio) (£)40	M2 A1	May be seen in stages. M1 for 1 : 2 : 0.5 oe seen or implied. May be in any order and/or not explicitly in a ratio. May be seen as an equation e.g. $x + 2x + 0.5x = 70$ $x + 2x + 4x = 70$ $x + 0.5x + 0.25x = 70$ CAO
	(5)	

20*. Radius of circle (= $15 - 5$ =) 10 (cm)	B1	May be seen in further work or on diagram Diameter = 20 (cm) implies B1.
(Curved length =) $(\frac{1}{4} \times) 2 \times \pi \times 10$	M1	FT 'their 10' Allow 15.7(0...) or 15.71
$= 5\pi$	A1	FT 'their 10' provided $\frac{1}{4} \times 2 \times \pi \times$ 'their 10' has been used .
(Perimeter =) $5\pi + 30$ (cm)	B1	FT 'their 5π ' + 30 provided from use of $\frac{1}{4} \times 2\pi r$ Award B1 M1 A1 B0 for an answer of 45.7(0....)
	(4)	

21*(a)		
-4	B1	
21*(b)		Mark final answer
$2c + 1.5d < 20$ or $2c + 1.5d \leq 19.50$ or $20 - 2c - 1.5d > 0$ or $200c + 150d < 2000$ oe or $3.5 \leq 2c + 1.5d < 20$ or $0 < 2c + 1.5d < 20$	B2	B1 for one of the following: $2c + kd < 20$ ($k \neq 1.5$ and $k \neq 0$) $20 - 2c - kd > 0$ ($k \neq 1.5$ and $k \neq 0$) $kc + 1.5d < 20$ ($k \neq 2$ and $k \neq 0$) $20 - kc - 1.5d > 0$ ($k \neq 2$ and $k \neq 0$) $2c + 1.5d > \text{ or } \geq \text{ or } \leq 20$ (not = 20) $2c + 1.5d \leq 19(.99)$ - c and d reversed $2d + 1.5c < 20$ - other letters rather than c and d in a correct inequality e.g. $2x + 1.5y < 20$ - inclusion of 'x' signs e.g. $cx2 + dx1.50 < 20$ $c2 + d1.5 < 20$ Penalise -1 if mixed units are used e.g. $200c + 150d < 20$ B2-1 (1 mark) $200c + 1.5d < 2000$ B2-1 (1 mark) $2c + 150d > 20$ B1-1 B1-1 (0 marks) Possible B1 if using double inequality but with similar errors in notation as mentioned from B1s above (e.g. $3.5 \leq c2 + d1.5 < 20$)
	(3)	
22*.		
(BC =) $\sqrt{(10^2 - 6^2)}$ or $BC^2 = 10^2 - 6^2$ or better	M2	M2 for appropriate sight of 6, 8, 10 M1 for any one of the following: $6^2 + (BC)^2 = 10^2$ $10^2 - 6^2$ including $BC = 10^2 - 6^2$ 64 including $BC = 64$
(BC =) 8 (cm)	A1	May be seen on diagram
(Surface area =) $(2 \times \frac{1}{2} \times) 8 \times 6 + 6 \times 7 + 8 \times 7 + 10 \times 7$ or $8 \times 6 + (6 + 8 + 10) \times 7$ oe (= $2 \times 24 + 42 + 56 + 70$)	M2	M1 for a sum including 3 different correct calculations for areas ie omitting or miscalculating just one/both triangles or one rectangle FT for M2 or M1 provided Pythagoras attempted. - If 'their BC' < 10, FT for a possible M2 or M1. - If 'their BC' ≥ 10, FT for a possible M1 only.
216 (cm ²)	A1	FT for 'their surface area' correctly evaluated, provided the second M2 awarded.
	(6)	

24*.(b) $\frac{27+6}{0.3}$ 110	M2 A1	May be seen in stages. Award M1 for any one of the following: - appropriate sight of 33 (from $27 + \sqrt{36}$ OR $3^3 + 6$ OR $3^3 + \sqrt{36}$) - sight of any TWO of 27, 6 (or 2×3), 0.3 correctly placed $\frac{3^3 + \sqrt{4 \times 9}}{0.3}$ oe Note: sight of 27, 6 and 0.3 not written within expression is awarded M0 CAO Mark final answer Award a possible M2A0 for $\frac{30+6}{0.3}$ if 27 seen but then changed to 30.
	(5)	
25*. (Area =) $6.2 \div 0.05$ 124 (cm²) (Length of cuboid =) $124 \div 8$ 15.5 (cm)	M2 A1 M1 A1	M1 for $0.05 = 6.2 \div \text{Area}$ CAO FT 'their 124' provided at least M1 previously awarded FT
<u>Alternative method.</u> $0.05 = \frac{6.2}{8x}$ $0.05 \times 8x = 6.2$ $x = 6.2 \div (0.05 \times 8)$ $x = 15.5 \text{ (cm)}$	M2 M1 m1 A1	M1 for $0.05 = 6.2 \div 8x$ CAO
	(5)	
26*. 125	B2	B1 for one of the following: 5^3 $\frac{1}{5^{-3}}$ $\left(\frac{1}{5}\right)^{-3}$ If no marks, award SC1 for $(5^{-3} =) \frac{1}{125}$ or 0.008
	(2)	

27*. (a) 24 $\times \frac{5}{8}$ or $(\div 1.6)$ oe $\times \frac{300}{180}$ or $\times \frac{5}{3}$ or $(\div 0.6)$ oe = 25 (hours)	M1 M1 A1	<u>A table method altering all 3 values in the same ratio at the same time is M0</u> M marks may be seen in either order e.g. $\frac{\text{Workers}}{8} \quad \frac{\text{Length}}{180} \quad \frac{\text{Time}}{15}$ FT from M0 previously awarded Must be from use of 24 e.g. if this calculation is performed first e.g. $\frac{\text{Workers}}{5} \quad \frac{\text{Length}}{300} \quad \frac{\text{Time}}{40}$ CAO
<u>Alternative method</u> (Number of metres per worker per hour =) $(180 \div 5) \div 24 (= 1.5)$ (Number of hours needed =) $300 \div ((180 \div 5) \div 24 \times 8)$ $(= 300 \div (1.5 \times 8) = 300 \div 12)$ = 25 (hours)	M1 M1 A1	<u>May be seen in stages</u> CAO
27*. (b)(i) Reference to all workers working at the same rate (as before). Examples for E1: Working as hard (as the original 5) etc Work at constant/same pace or speed	E1	Do not allow: Examples for E0: ‘each worker does the same amount of work’ ‘any reference to breaks cost/availability of materials and/or tools’ ‘all workers built the same amount of wall’ ‘that they will work continuously’ ‘the 8 workers will work in the same amount of time as the 5 workers’
27*. (b)(ii) Time or answer will change / increase / decrease dependent on (b)(i)	E1	If no valid assumption is made, then this mark cannot be awarded. Cannot award E0 E1.
	(5)	