



GCSE MARKING SCHEME

SUMMER 2025

**GCSE
MATHEMATICS
UNIT 2 – FOUNDATION TIER
3300U20-1**

About this marking scheme

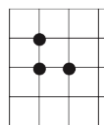
The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

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.

WJEC GCSE MATHEMATICS

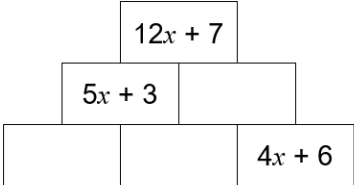
SUMMER 2025 MARK SCHEME

GCSE Mathematics Unit 2: Foundation Tier	Mark	Comments
1.(a) 1488	B1	Do not accept the correct answer written only in words.
1.(b) one point five two	B1	Do not accept: • 'one point fifty-two' • 'one decimal point five two' • 'one dot five two'.
1.(c) $4 \times (7 + 3) - 1 = 39$	B1	
1.(d) -4, -1, 3.09, 3.2	B1	
1.(e) 67, 134, 201	B1	Condone the inclusion of 268 if 67 is omitted.
1.(f) 50	B1	
2.(a) 	B1	
2.(b) 	B1	
3. (Perimeter of square = $12 + 12 + 12 + 12$) = 48 (cm) (Side length of equilateral triangle =) $48 \div 3$ = 16 (cm)	B1 M1 A1	May be implied. F.T. 'their derived/stated 48' provided $\neq$ 12 or 36.
3.OCW Organisation and Communication. Accuracy of writing.	OC1 W1	For OC1, candidates will be expected to: • present their response in a structured way • explain to the reader what they are doing at each step of their response • lay out their explanation and working in a way that is clear and logical • write a conclusion that draws together their results and explains what their answer means For W1, candidates will be expected to: • show all their working • make few, if any, errors in spelling, punctuation and grammar • use correct mathematical form in their working • use appropriate terminology, units, etc
4.(a) 100	B1	
4.(b) 	B1	CAO

4.(c) 26, 21 Subtract 5 (from the previous term)	B1 B1	Accept -5, - take away 5, - going down in 5s.
5.(a) 	B1	Mark intention if unambiguous. Must be labelled.
5.(b) 	B1	Mark intention if unambiguous. Must be labelled. FT 'their Y' i.e. arrow G placed such that $P(G) = 0.5 - \text{'their } P(Y)\text{'}$, provided $P(G) \neq P(Y)$. If both arrows are correctly placed but unlabelled, award SC1 in (b).
6. 1 AND 21 (in any order)	B3	Answer space takes precedence. B2 for an answer of 1 OR 21. B1 for sight of one of the following: $4 - 3$ $18 + 3$ - current range = 14 or $18 - 4 = 14$ - new range = 17 - answers of 10 AND 20 (from $13 - 3$ and $17 + 3$)
7.(a) 390	B2	B1 for: - sight of $385(\cdot 961\dots)$ rounded or truncated to the nearest whole number or better. - a final answer of $390\cdot 0$.
7.(b) $6\cdot 2$	B2	B1 for: - sight of $6(\cdot 236\dots)$ rounded or truncated. - a final answer of $6\cdot 20$.
8. $(170 - 34) = 136$ $(136 \div 8) = 17$	B1 B1	Mark final answer. FT 'their derived 136'. If 'their derived 136' $\div 8$ gives a whole number, it must be evaluated for this B1. Award B1 B1 for unsupported or embedded answers. e.g. $17 \times 8 = 136$ (and $136 + 34 = 170$). Penalise -1 if later contradicted by Ffion's number $\neq 17$.
9.(a) $\frac{3}{4} \times 122$ or equivalent $= 91\cdot 5$ or equivalent	M1 A1	M1 for $122 - (122 \div 4)$. Accept $\frac{366}{4}$ or $\frac{183}{2}$. Award M1 A0 for a final answer of $366 \div 4$ $183 \div 2$ 91 92
9.(b) $0\cdot 6(0) \times 315$ or equivalent $= 189$	M1 A1	
9.(c) 243	B1	
10.(a) 121	B1	Answer line takes precedence.
10.(b) 125	B1	Answer line takes precedence.

10.(c)	126	B1	Answer line takes precedence.
11.	$18 \times 2.5 + 5 (\times) y = 60$ or equivalent $5y = 15$ or $y = \frac{15}{5}$ $(y =) 3$	M1 A1 A1	$(45 + 5y = 60)$ Implies M1A1. Award A1 for the appropriate sight of 5y and 15 (or equivalent) but not in an equation. Sight of $5y + 15$ is awarded M1 A0. $(60 - 45 =) 15$ or equivalent implies M1 but not M1A1. $(60 - 45 =) 15$ then $15 \div 5$ or equivalent implies M1A1. FT only from $5y = k$ and provided M1 awarded. Mark final answer. An unsupported answer of 3 is awarded M1A1A1. Allow M1A1A1 for a correct embedded answer BUT only M1A1A0 if contradicted by $y \neq 3$. If FT leads to a whole number answer, it must be shown as a whole number. Otherwise, accept a fraction or decimal. If no marks gained, award SC1 for one of the following: - unsupported $y = 21$ (from $y = 105 \div 5$) - sight of $105 = 5 (\times) y$.
11. <u>Alternative method:</u>	$y = \frac{t - 18x}{5}$ $y = \frac{60 - 18 \times 2.5}{5}$ $(y =) 3$	B1 M1 A1	$= \frac{60 - 45}{5}$ If B0 awarded, FT for one slip in their rearrangement. Allow M1A1 for a correct embedded answer BUT only M1A0 if contradicted by $y \neq 3$. If FT leads to a whole number answer, it must be shown as a whole number. Otherwise, accept a fraction or decimal. If no marks gained, award SC1 for any one of the following: - unsupported $y = 21$ (from $y = 105 \div 5$) - sight of $y = 105 \div 5$.
12.(a)	 Rhombus	B1	
12.(b)	(Volume =) $8 \times 13 \times 7$ $= 728 \text{ (cm}^3\text{)}$	M1 A1	Answer space takes precedence. Any additional calculation (e.g. $728 \div 2$) is M0.

13.(a) Correct enlargement	B2	Allow correct enlargement in any orientation. Award B1 for three adjacent sides correctly enlarged in the same orientation. If no marks, award SC1 for an enlargement by a factor of 2 or 3.
13.(b) Correct translation.	B1	
14.(a) Valid explanation which refers to use of angles at a point 360° e.g. “three (interior) angles can be added together to make 360°” “120 is a factor of 360” “360 is a multiple of 120” “$360 \div 3 = 120$” or equivalent “$120 \times 3 = 360$” or equivalent	E1	Do not accept “they fit together” “they all add up to 360” (unless ‘they’ are identified as the three (interior) angles – could be on diagram) “all exterior angles add up to 360”
14.(b) (interior angle =) $180 - (360 \div 5) \quad \text{or} \quad \frac{(5 - 2) \times 180}{5}$ 108° Valid explanation which refers to 108° AND 360° (°) e.g. “108 is not a factor of 360” “360 is not a multiple of 108” “$360 \div 108$ is not a whole number” or equivalent.	M2 A1 E1	May be seen in stages. Award M1 for any one of the following: • (Exterior angle =) $360 \div 5$ • (Exterior angle =) 72 • (Sum of the interior angles =) $(5 - 2) \times 180$ • (Sum of the interior angles =) 540. CAO. Dependent on M2 previously awarded. FT ‘their 108’.

15. (Group A Green = $92 \div 4 =$ 23 (people) (Group B Green = $5 \times 4 =$ 20 (people) (Total number of people = $92 + 32 + 20 + 8$ or $92 + 15 \times 4 =$ 152 (Probability of choosing Green = $\frac{43}{152}$ or equivalent ISW	B1 B1 B2 B1	Answers may be seen on diagrams. May be implied or seen in later working. May be implied or seen in later working. May be implied or seen in later working. (= $92 + 60$) For B2, FT for any one of the following: • $92 + 3 \times$ 'their 20' evaluated correctly • $92 + 15 \times$ 'their 4' evaluated correctly • $132 +$ 'their 20' evaluated correctly. Award B1 for any one of the following: • 60 (total for Group B) • $92 + 32 + 20 + 8$ evaluated incorrectly • $92 + 3 \times$ 'their 20' evaluated incorrectly • $92 + 15 \times 4$ evaluated incorrectly • $92 + 15 \times$ 'their 4' evaluated incorrectly • $132 +$ 'their 20' evaluated incorrectly. (= 28.2(89...) % or 0.282(89...)) If answer is shown as a fraction, it must be simplified as a single fraction. Allow rounded or truncated answer for the decimal or percentage, provided 28.2(89...) % or equivalent has been seen. FT <u>'their 23 + 'their 20'</u> , provided < 1. 'their derived 152' Penalise incorrect notation -1. e.g. '43 in 152'.
16. 	B3	Fully correct diagram. Mark final answer in each box. For B2 or B1: FT $7x + 4 +$ 'their $5x + 3$' (provided 'their $5x + 3$' and the final expression is in the form $ax \pm b$). Award B2 for appropriate sight of any two of $4x + 6$, $5x + 3$, $12x + 7$ Award B1 for appropriate sight of any one of $4x + 6$, $5x + 3$, $12x + 7$.

17. (Shaded area =) $10 \times 10 - \pi \times 5^2$ $21.4 \leq \text{shaded area} \leq 21.5 \text{ (cm}^2\text{)}$	M2 A2	Answers may be seen on diagram. Answer space takes precedence. May be seen in stages. Award M1 for any one of the following: • appropriate sight of 10×10 or equivalent • area of square = $100 \text{ (cm}^2\text{)}$ • appropriate sight of $\pi \times 5^2$ or equivalent • appropriate sight of 25π • $78.5 \leq \text{area of circle} \leq 78.55 \text{ (cm}^2\text{)}$ FT 'their 10^2' – 'their $\pi \times 5^2$', provided that: • π is used AND • area of square > area of circle AND • M1 awarded. Award A1 for one of the following: • $78.5 \leq \text{area of circle} \leq 78.55 \text{ (cm}^2\text{)}$ • $100 - 25\pi$.
18.(a) $43.2 \pm 0.9 \text{ (km)}$	B2	Answer line takes precedence. Accept an answer 42.3 (km) to 44.1 (km) inclusive. If units are given, they must be correct for B2. Award B1 for any one of the following: • $4.5 \times [9.6 \pm 0.2] \text{ (km)}$ • for correctly evaluating 'their 9.6' $\times 4.5$ provided 'their 9.6' is between 9 and 10 exclusive.
18.(b) $305(^{\circ}) \pm 2(^{\circ})$	B1	Accept an answer between $303(^{\circ})$ to $307(^{\circ})$ inclusive.