



Mark Scheme (Results)

Summer 2025

Pearson Edexcel International GCSE
In Mathematics A Modular (4WM2F) Paper 01
Unit 2F Foundation Tier

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme.

Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.

- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Types of mark

- M marks: method marks
- A marks: accuracy marks
- B marks: unconditional accuracy marks (independent of M marks)

Abbreviations

- cao – correct answer only
- ft – follow through
- isw – ignore subsequent working
- SC - special case
- oe – or equivalent (and appropriate)
- dep – dependent
- indep – independent
- eeoo – each error or omission

- **No working**

If no working is shown then correct answers normally score full marks

If no working is shown then incorrect (even though nearly correct) answers score no marks.

- **With working**

If there is a wrong answer indicated on the answer line always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.

If it is clear from the working that the “correct” answer has been obtained from incorrect working, award 0 marks.

If a candidate misreads a number from the question. Eg. Uses 252 instead of 255; method marks may be awarded provided the question has not been simplified. Examiners should send any instance of a suspected misread to review.

If there is a choice of methods mark the one that leads to the answer on the answer line. If there is no answer given then mark the method that gives the lowest mark and award this mark.

If there is no answer on the answer line then check the working for an obvious answer.

- **Ignoring subsequent work**

It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question: eg. Incorrect cancelling of a fraction that would otherwise be correct.

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect eg algebra.

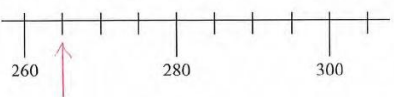
Transcription errors occur when candidates present a correct answer in working, and write it incorrectly on the answer line; mark the correct answer.

- **Parts of questions**

Unless allowed by the mark scheme, the marks allocated to one part of the question CANNOT be awarded in another.

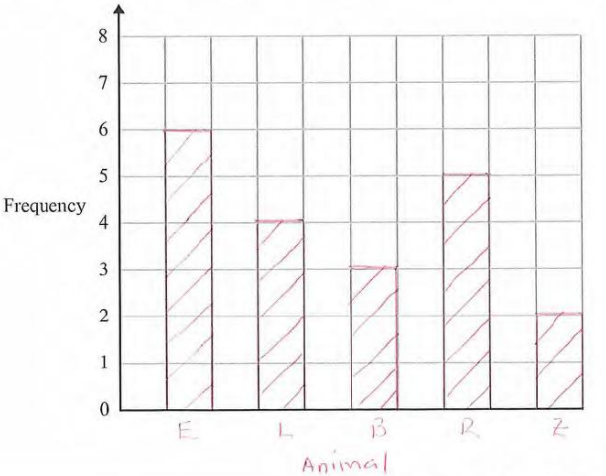
International GCSE Maths				
Figures in inverted commas must come from a correct method previously seen unless otherwise stated.				
Question	Working	Answer	Mark	Notes
1 (a)(i)		32	1	B1 cao
(ii)		+4	1	B1 Add 4 or plus 4 oe or $4n + 8$ or $(n) + 4$ Allow +4 seen on the sequence above. Do not allow “a difference of 4” (unless we see + 4 by the sequence)
(b)		64	1	B1 cao
(c)	All the numbers are even All numbers are in the 4 times table 83 is odd It goes to 84 and skips 83 (the 19 th term) is 84 $4n + 8 = 83$ gives n as a non-integer	Acceptable response	1	B1
				Total 4 marks

Question	Working	Answer	Mark	Notes
2 (a)		A (and) D	1	B1
(b)		B	1	B1
(c)		A correctly enlarged triangle	2	B2 A shape that is an enlargement of the given shape which may be rotated (B1 for a triangle with 1 of the sides correctly enlarged.)
				Total 4 marks

Question	Working	Answer	Mark	Notes
3 (a)		75.2	1	B1 Allow $75\frac{1}{5}$ oe
(b)		A clear indication of marking the first notch after 260	1	B1 cao
				Total 2 marks

Question	Working	Answer	Mark	Notes
4 (a)		15 45	1	B1 oe 15,45 1545 15.45 15:45 etc
(b)		2 (hours) 45 (minutes)	2	B1 cao B1 cao
				Total 3 marks

Question	Working	Answer	Mark	Notes
5 (a)		127	1	B1 answers in the range 125 – 129 accepting decimal values eg 125.5
(b)		Correct line	1	B1 A line between 8.2 cm and 8.6 cm
(c)		Radius drawn	1	B1 a radius clearly drawn
(d)		tangent	1	B1 Accept incorrect spelling if meaning is clear eg Tanjent, tangen, etc
(e)		2	1	B1 For 2 or two
(f)		4300	1	B1 Allow 4300.0(00...)
				Total 6 marks

Question	Working	Answer	Mark	Notes
6 (a)	elephant – 6 lion – 4 buffalo – 3 rhinoceros – 5 zebra - 2	Correct list of frequencies 6, 4, 3, 5, 2	2	B2 for all correct frequencies (ignore tally column) (B1 for 3 or 4 correct frequencies or for 4 or 5 tallies correct but not totalled or for frequencies written as probabilities with 3 or 4 or 5 correct numerators)
(b)	 Frequency Animal	A correctly labelled bar chart	3	B2 B2ft for all 5 correct bars, ft their figures (Do not follow through 0) (B1ft for 3 or 4 correct bars, ft their figures, (Do not follow through 0) (B1ft for 5 correct indications of heights, eg, cross, dot, etc ft their figures, (Do not follow through 0) NB Condone gaps of different widths or no gaps between bars and also bars of different widths) B1 for all 5 bars labelled – use of initials or a key is acceptable
				Total 5 marks

Question	Working	Answer	Mark	Notes
7	$12 \div 5 (= 2.4(0))$ or $\frac{3}{5} \times 12 (= 7.2)$		4	M1 A correct method to find the cost of 1 pineapple or 3 pineapples
	eg $3 \times "2.40" + 2x = 8.30$ oe eg $(2x =) 8.30 - 3 \times "2.40"$ or $(2x =) 1.1(0)$			M1 "2.40" must be correct or from correct working
	$\frac{"1.1"}{2} + "2.40"$			M1 All must be correct or from correct working
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	2.95		A1 cao
				Total 4 marks

Question	Working	Answer	Mark	Notes
8	(a) $120 \div 30 (= 4)$ or $30 \div 120 (= 0.25)$ oe or $\frac{x}{30} = \frac{100}{120}$ oe or $120x = 3000$ oe		2	M1
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	25		A1 cao
	(b) $360 - 120 - 100 (= 140)$ oe		3	M1
	$\frac{"140"}{2+5} (= 20)$ oe or $\frac{2}{7} \times 140$			M1
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	40		A1
				Total 5 marks

Question	Working	Answer	Mark	Notes
9	(2 litres =) 2000 (millilitres) or (180 millilitres =) 0.18 (litres)		4	B1 Can be implied from correct working
	eg 2000 ÷ 180 oe or 2 ÷ 0.18 oe or 11(.111....) or $\frac{100}{9}$ or $11\frac{1}{9}$ or 180, 360, 540, 720, 1800, 1980 or 2000, 1820, 1640, 1460 200, 20			M1 ft their millilitres ÷ 180 or 2 ÷ their litres for this mark NB Repeated subtraction must continue to a number less than 180 eg 200 ÷ 180 or 200 – 180 gains this mark only eg 500 ÷ 180 or 500 – 180 – 180 gains this mark only eg 2 ÷ 1.8 or 2 – 1.8 gains this mark only Allow one arithmetic error for repeated addition or repeated subtraction for this mark
	11 × 180 (= 1980) or 11 × 0.18 (= 1.98) or 180, 360, 540, 720, 1800, 1980 or 2000, 1820, 1640, 1460 200, 20			M1 dep on B1 or for an answer of 0.02 No errors allowed for repeated addition or repeated subtraction for this mark
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	20		A1
				Total 4 marks

Question	Working	Answer	Mark	Notes
10 (a)	0.65×800 oe		2	M1
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	520		A1 cao
(b)	$\frac{1}{5}$ or 0.2 or $\frac{4}{5}$ or 0.8 seen		2	M1 For a use of a correct fraction or decimal for either pink or orange (may be as part of a calculation)
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	20		A1 cao
Total 4 marks				

Question	Working	Answer	Mark	Notes
11 (a)		A correct reason	1	B1 He should have got $30 + 20$ oe The answer should be 50 oe $-4 \times -5 = (+) 20$ oe Minus and minus gives a positive oe etc
(b)		1, 3, 5, 7, 9	2	B2 for 1, 3, 5, 7, 9 with no extras (in any order) (B1 for four correct values with no more than one incorrect or for five correct values with no more than one incorrect)
Total 3 marks				

Question	Working	Answer	Mark	Notes
12 (a)		$8ac$	1	B1 or $8ca$
(b)		$21mp$	1	B1 or $21pm$
(c)	$q - e = 7t$ oe or $\frac{q}{7} = \frac{7t}{7} + \frac{e}{7}$ oe		2	M1
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	$t = \frac{q - e}{7}$		A1 oe eg $\frac{q}{7} - \frac{e}{7} = t$
(d)		55	1	B1 cao
(e) (i)		$w + 9$	1	B1 oe
(e)(ii)	$[w + 9] + 4w + w$ oe eg $6w + 9$ $T = w + [w + 9]$ oe eg $T = 2w + 9$ $T = w + 4w$ oe eg $T = 5w$ $T = 4w + [w + 9]$ oe eg $T = 5w + 9$		2	M1 A correct expression for summing the three expressions or a formula with at least 2 correct expressions which could have an incorrect expression added on (of the 3 expressions summed) or a correct' formula that is unsimplified where $[w + 9]$ is their answer to e(i)
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	$T = 6w + 9$		A1 A correct simplified formula
				Total 8 marks

Question	Working	Answer	Mark	Notes
13			2	M1 For a list of at least 3 multiples of 20 and a list of at least 3 multiples of 35 $20 = 2 \times 2 \times 5$ and $35 = 7 \times 5$ (could be in a factor tree and need not have $\times$ signs)
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	140		A1 Allow $2 \times 2 \times 5 \times 7$ oe
				Total 2 marks

Question	Working	Answer	Mark	Notes
14	180 + 73 or $360 - (180 - 73)$ or $360 - 107$ or $270 - (90 - 73)$ or $270 - 17$ or $270 - (180 - 90 - 73)$		2	M1 or for 73 or for 107 or for 253 seen in the correct place on the diagram by point <i>B</i> or correctly identified by labelling
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	253		A1
				Total 2 marks

Question	Working	Answer	Mark	Notes
15 (a)	$12 \div 4 (= 3)$ or $50 \div 4 (= 12.5)$ oe		2	M1 for a correct method to find the SF or a correct calculation to find the amount of cheese for one person
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	150		A1
(b)	$180 \div 40 (= 4.5)$ oe or $40 \div 4 (= 10)$		2	M1 for a correct method to find the SF or a correct calculation to find the amount of butter for one person
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	18		A1
				Total 4 marks

Question	Working	Answer	Mark	Notes
16		1 st card = 4	3	B1
		2 nd card = 6		B1 or a list of 6 numbers with a mode of 6
		4 th card = 9		B1
				SCB2 for 4, 6 and 9 in the incorrect order
				Total 3 marks

Question	Working	Answer	Mark	Notes
17	$\left(\frac{8+12}{2} \times 3\right) (= 30)$ or $3 \times 8 + 0.5 \times 4 \times 3 (= 30)$ $9 \times 5 (= 45)$ $9 \times 8 (= 72)$ $9 \times 12 (= 108)$ $9 \times 3 (= 27)$		3	M1 For a correct method to find the areas of 2 different faces
	$\left(\frac{8+12}{2} \times 3\right) (= 30)$ or $3 \times 8 + 0.5 \times 4 \times 3 (= 30)$ $9 \times 5 (= 45)$ $9 \times 8 (= 72)$ $9 \times 12 (= 108)$ $9 \times 3 (= 27)$ “30” + “30” + “45” + “72” + “108” + “27”			M1 For adding together the area of 5 or 6 faces, at least 4 of which are from a correct method
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	312		A1 cao
				Total 3 marks

Question	Working	Answer	Mark	Notes
18	$8000 - 5600 (= 2400)$ or $5600 - 8000 (= -2400)$ $\frac{5600}{8000} (= 0.7)$ or $8000x = 5600$		3	M1
	$\frac{8000 - 5600}{8000} (\times 100) (= 0.3 (\times 100))$ or $\frac{5600 - 8000}{8000} (\times 100) (= -0.3 (\times 100))$ or $0.7 \times 100 (= 70)$ $(1 - 0.7) (= 0.3)$			M1 A correct calculation for the percentage loss or seeing 0.3 or 70 as either the answer or in part of the working or an answer of – 30
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	30		A1 SCB1 if no marks scored for an answer of 42.8(57...) truncated or rounded
				Total 3 marks

Question	Working	Answer	Mark	Notes
19		Bisector with construction arcs	2	B2 B2 for a fully correct perpendicular bisector with 2 pairs of intersecting arcs shown (the line and the arcs can intersect on or within the overlay guidelines) (B1 for 2 pairs of intersecting arcs and no perpendicular bisector drawn or for a correct bisector perpendicular drawn within or on guidelines but no arcs or insufficient arcs or one pair of intersecting arcs and perpendicular bisector drawn on just one side of AB) NB Overlay is available
				Total 2 marks

Question	Working	Answer	Mark	Notes
20 (a)		$4n + 7$	2	B2 oe eg $11 + (n - 1)4$ (B1 for $4n \dots$)
(b)	$3^{\text{rd}} = 19$ $5^{\text{th}} = 29$ $11^{\text{th}} = 59$ $15^{\text{th}} = 79$ $21^{\text{st}} = 109 \dots \text{etc}$	eg 19 or 29 or 59 or 79 etc	1	B1 one or more numbers that are in the sequence and are prime numbers with no incorrect numbers
				Total 3 marks

Question	Working	Answer	Mark	Notes
21 (a)	$\frac{10}{4} \left(= \frac{5}{2} = 2.5 \right)$ or $\frac{4}{10} \left(= \frac{2}{5} = 0.4 \right)$ or $\frac{x}{5} = \frac{10}{4}$ oe or $\frac{x}{10} = \frac{5}{4}$ oe		2	M1 for a correct SF can be expressed as a fraction, decimal or ratio (may or may not be used) or for a correct equation in x Allow any letter for x
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	12.5		A1 oe eg $\frac{50}{4}$ or $\frac{25}{2}$ or $12\frac{1}{2}$ or $12\frac{2}{4}$
(b)	$24 \div [2.5]$ oe or $\frac{y}{24} = \frac{4}{10}$ oe or $\frac{y}{24} = \frac{5}{[12.5]}$ oe or $\frac{y}{4} = \frac{24}{10}$ oe or $\frac{y}{5} = \frac{24}{[12.5]}$ oe		2	M1 ft ie [2.5] is their SF from (a) or for a correct equation in y Allow any letter for y ft their answer to (a) ie [12.5] is their answer to (a)
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	9.6		A1 oe eg $\frac{48}{5}$ or $9\frac{3}{5}$ If (a) $x = 9.6$ and (b) $y = 12.5$ then M1A0M1A0
				Total 4 marks

Question	Working	Answer	Mark	Notes
22	$240 \div (3 + 4 + 5) (= 20)$ or $240 \times \frac{3}{3+4+5} (= 60)$ oe or $240 \times \frac{4}{3+4+5} (= 80)$ oe or $240 \times \frac{5}{3+4+5} (= 100)$ oe		4	M1 for a correct method to find the value of one share NB $(240 \div 3 =) 80$, $(240 \div 4 =) 60$ and $(240 \div 5 =) 48$ scores M0
	For two of (Pau:) $3 \times "20" + 10 + 10 (= 80)$ or $"60" + 10 + 10 (= 80)$ (Sam:) $4 \times "20" - 10 (= 70)$ or $"80" - 10 (= 70)$ (Tia:) $5 \times "20" - 10 (= 90)$ or $"100" - 10 (= 90)$			M1 for the correct values for 2 of the people after S and T give P £10
	80, 70 and 90 or eg $9 : 7 : 8$ oe or eg $4 : 3.5 : 4.5$ oe			M1 for all 3 of 80, 70, and 90 correct (ignore units) or for the correct values for the final ratio in the wrong order (ignore units) or for the correct values for the final ratio unsimplified (ignore units)
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	8 : 7 : 9		A1 other orders are acceptable if labelled correctly on the answer line or working
				Total 4 marks

Question	Working	Answer	Mark	Notes
23	$5 \times x + 15 \times 3 + 25 \times 2 + 35 \times 4 + 45 \times 2$ oe $5x + 45 + 50 + 140 + 90$ oe eg $5x + 325$ (lower bound products 0, 30, 40, 120, 80) [sum of lower bound products is: 270] (upper bound products 10x, 60, 60, 160, 100) [sum of upper bound products is: $10x + 380$]		4	M2 for at least 4 correct products added (need not be evaluated ie can be in the form $5 \times x + 15 \times 3 + \dots$) If not M2 then award M1 for: consistent use of values within interval (including end points) for at least 4 products added (need not be evaluated ie can be in the form $10 \times x + 20 \times 3 + \dots$) or correct midpoints used for at least 4 products and not added
	$\frac{5x + 325}{x + 11} = 20$ or $5x + 325 = 20(x + 11)$ oe			M1 (dep on at least M1) Dividing their Σfx by $x + 11$ and equating to 20 or equating their total times
	Working not required, so correct answer scores full marks (unless from obvious incorrect working)	7		A1 cao (SCB1 if no marks scored, for dividing by $x + 11$)
				Total 4 marks

Question	Working	Answer	Mark	Notes	
24	$0.07 \times 4000 (= 280)$ or $1.07 \times 4000 (= 4280)$		3	M1 for finding 7% of 4000 or 107% of 4000	M2 for $1.07^3 \times 4000$ or $1.07^4 \times 4000 (= 5243....)$
	$4000 + 280 (= 4280)$ or $0.07 \times 4280 (= 299.6)$ and $4280 + 299.6 (= 4579.6)$ and $0.07 \times 4579.6 (= 320.572)$ or “280” + “299.6” + “320.572” (= 900(.172))			M1	
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	4900		A1 allow answers in the range 4900 – 4901 If no other mark awarded, SCB1 for $4000 \times 0.07 \times 3 (= 840)$ or $4000 \times 0.21 (= 840)$ or $4000 + 4000 \times 0.07 \times 3 (= 4840)$ or $4000 \times 1.21 (= 4840)$ or $0.93 \times 4000 (= 3720)$ or $0.79 \times 4000 (= 3160)$ or $0.93^3 \times 4000 (= 3217...)$ or $4000 \times 1.07^2 (= 4579...)$	
				Total 3 marks	

Question	Working		Answer	Mark	Notes
25	eg $3x + 5y = 8$ – $20x + 5y = -17.5$ Subtracting $(3x - 20x = 8 - -17.5 \text{ or } -17x = 25.5)$ or $3x + 5(-3.5 - 4x) = 8$ or $4x + \frac{8-3x}{5} = -3.5$	eg $12x + 20y = 32$ – $12x + 3y = -10.5$ Subtracting $(20y - 3y = 32 - -10.5 \text{ or } 17y = 42.5)$ or $3\left(\frac{-3.5-y}{4}\right) + 5y = 8$ or $4\left(\frac{8-5y}{3}\right) + y = -3.5$		3	M1 for a correct method to eliminate x or y: coefficients of x or y the same and correct operator to eliminate selected variable (condone any one arithmetic error in multiplication) or writing x or y in terms of the other variable and correctly substituting (condone missing brackets) NB: the mark is for the method and not for the result of the method. However, if the correct result of the method is seen, the mark can be awarded
	$3 \times "-1.5" + 5y = 8$ or $4 \times "-1.5" + y = -3.5$ or $y = -3.5 - 4 \times "-1.5"$ or $y = \frac{8-3 \times "-1.5"}{5}$	$3x + 5 \times "2.5" = 8$ or $4x + "2.5" = -3.5$ or $x = \frac{-3.5 - "2.5"}{4}$ or $x = \frac{8-5 \times "2.5"}{3}$			M1 dep on first M1 for a correct method to find other variable by substitution of found variable into one equation or for repeating the above method to find the second variable.
	<i>Working required</i>		$x = -1.5$ $y = 2.5$		A1 oe dep on M1
					Total 3 marks

Question	Working	Answer	Mark	Notes
26 (a)	$-3t - 2t < 15 - 7$ or $-5t < 8$ oe or $7 - 15 < 2t + 3t$ or $-8 < 5t$ oe or $t = -1.6$ or $t < -1.6$		2	M1 for correctly isolating terms in t on one side and number terms on the other side (use of $=$ or any inequality symbol or variable is permitted)
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	$t > -1.6$		A1 oe eg $-1.6 < t$ or $t > -\frac{8}{5}$ or $-\frac{8}{5} < t$ oe Must have correct inequality symbol on answer line NB Sight of correct answer in working space and just $(t =) -1.6$ oe on answer line gains M1 only
(b)		$x \geq 2$	3	B1 oe allow $x > 2$ or $2 < x$
		$y \geq 3$		B1 oe allow $y > 3$ or $3 < y$
		$x + y \leq 9$		B1 oe allow $x + y < 9$ or $y < 9 - x$ or $9 > x + y$ SC B2 for all of $x \leq 2, y \leq 3, x + y \geq 9$ oe or $x < 2, y < 3, x + y > 9$ SC B1 for all of $x = 2, y = 3, x + y = 9$ oe
				Total 5 marks

Question	Working	Answer	Mark	Notes
27 (a)		0.000 086	1	B1 cao
(b)	0.5×10^6 or 5×10^5 or 500 000 or $\frac{1}{2} \times 10^6$		2	M1
	<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	5×10^5		A1 Accept $5 \cdot 10^5$
				Total 3 marks

