



**General Certificate of Secondary Education
Practice Paper
Set 2**

**Mathematics (Linear) B
Paper 2
Foundation Tier**

4365

Mark Scheme

Mark Schemes

Principal Examiners have prepared these mark schemes for practice papers. These mark schemes have not, therefore, been through the normal process of standardising that would take place for live papers.

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Glossary for Mark Schemes

GCSE examinations are marked in such a way as to award positive achievement wherever possible. Thus, for GCSE Mathematics papers, marks are awarded under various categories.

- M** Method marks are awarded for a correct method which could lead to a correct answer.
- A** Accuracy marks are awarded when following on from a correct method. It is not necessary to always see the method. This can be implied.
- B** Marks awarded independent of method.
- M dep** A method mark dependent on a previous method mark being awarded.
- B dep** A mark that can only be awarded if a previous independent mark has been awarded.
- ft** Follow through marks. Marks awarded following a mistake in an earlier step.
- SC** Special case. Marks awarded within the scheme for a common misinterpretation which has some mathematical worth.
- oe** Or equivalent. Accept answers that are equivalent.
eg, accept 0.5 as well as $\frac{1}{2}$

Q	Answer	Mark	Comments
1(a)	[7.1, 7.3]	B1	
1(b)	<i>CD</i> or <i>FE</i>	B1	
1(c)	<i>AB</i> or <i>CD</i> or <i>FE</i>	B1	
1(d)	Evidence of counting squares or area of one rectangle seen	M1	eg 4×8 or 2×4
	40	A1	
	cm ²	B1	
2(a)	Circle radius 4 cm drawn with centre (4, 5)	B2	B1 for circle centre (4, 5) or Circle radius 3 cm drawn
2(b)	diameter circumference tangent chord	B3	B2 for 2 or 3 correct B1 for 1 correct
3(a)	Bar drawn at a height of 8	B1	
3(b)	14 (+) 20 (+) 8	M1	Allow one error
	42	A1	

Q	Answer	Mark	Comments
3(c)	22×3	M1	
	their $66 + 10 (\times 1)$	M1	
	76	A1	
4(a)	(regular) octagon	B1	
	(regular) pentagon	B1	
4(b)	Kite drawn	B1	
5(a)	15 seen	M1	
	$\frac{15}{25}$	A1	
	$\frac{3}{5}$	B1ft	
5(b)	$\frac{1}{4}$ or 1 and 4 or 2 and 8 or 4 and 16	B1	
	25	B1	
6(a)	28	B1	
6(b)	9	B1	

7	36	B2	B1 for a number which has at least 4 of the given factors, eg 18, 24 or 48
8	6, 12 and 72	B3	B2 for 2 correct B1 for 6 or 12 or 72 SC2 for the 3 numbers in the wrong order
*9(a)	$128 \div 3.8$ or $42.6(6\dots)$ or 42.7	M1	
	42	Q1	Strand (i)
9(b)	$1500 \div 15$ or 100 seen	M1	
	$500 - 135 - 96 - 211 (= 58)$	M1	
	their $58 + 100$	M1	
	158	A1	
10	Correct enlargement drawn	B2	B1 for incorrect scale factor or two sides correct
11	Correct net drawn with all 6 faces	B3	B2 for 5 faces correct B1 for 3 or 4 faces correct
12(a)	Point plotted or used at ([10.9, 11.1] , [69, 71])	M1	
	Straight ruled line from (0, 0)	A1	
12(b)	[4.6, 4.8]	B1ft	ft their graph

Q	Answer	Mark	Comments
12(c)	Reads off a value at a factor of 15	M1	eg 5 stones = [31, 33] kg
	Their reading scale up to 15	M1	eg [31, 33] × 3
	[93, 99] and more	A1	
13	$1700 - 355 - 432 - 805 (= 108)$	M1	
	$\frac{2}{3} \times 300$ or 200 seen	M1	
	their $200 \div 100 \times 55$	M1	
	110 and 108	A1	
14(a)	$7 \times 40 \div 50$	M1	oe
	5.6	A1	
14(b)	$3.5 \times 50 \div 7$	M1	oe
	25	A1	
15(a)	-5 3	B2	B1 for each
15(b)	Graph drawn	B2	B1 for at least 2 points plotted correctly
15(c)	$2 \times 7 - 1 = 13$ or one of (4, 7), (5, 9), (6, 11) and (7, 13)	B1	

Q	Answer	Mark	Comments
16(a)	$l + w + l + w$	M1	
	$P = 2l + 2w$	A1	$P = 2(l + w)$
16(b)	$30 - 2 \times 9.5$	M1	
	their $11 \div 2$ or 5.5	M1	
	9.5×5.5	M1	
	52.25	A1	
17	90 – 67 or 23 seen on right or 67 marked on diagram	M1	May be on diagram
	$180 - 90 - 67$	M1	oe
	23	A1	
*18(a)	$340 + 340 + 250 (= 930)$	M1	oe
	their $930 \times 0.20 (= 186)$	M1	oe
	their 930 – their 186	M1	oe their 930×0.8
	744 and Yes	A1	oe £6 to spare
	Correct method for total cost of holiday with discount	Q1	Strand (iii)
18(b)	200×1.15 or 200×1.13	M1	
	$200 \times 1.15 - 200 \times 1.13$	M1	oe
	4	A1	
19	Attempts to list all outcomes	M1	At least 4 correct
	Lists all outcomes correctly	M1	
	Identifies 12, 15, 16, 18, 25 and 36	M1	States 6 outcomes greater than 10
	$\frac{6}{12} = 50\%$	A1	

Q	Answer	Mark	Comments
*20	$x + 5x + 2x + 80 = 360$	M1	
	$8x = 360 - 80$	M1	
	$x = 35$	A1	
	Angle $C = 35$ from $180 - 35 - 110$	A1	
	Logical solution to find x and stating that angle $A = \text{angle } B$	Q1	Strand (ii) for correct conclusion
21(a)	No time frame	B1	
21(b)	No box for 4	B1	
22(a)	Correct heights plotted	B1	
	Mid values used and polygon drawn	B1	
22(b)	$24 + 10$ or 34	M1	
	$\frac{34}{60}$	A1	or any equivalent fraction, decimal or percentage
23	$2 + 4 + 7 (= 13)$	M1	
	$\frac{2}{13} \times 39$ or $\frac{4}{13} \times 39$ or $\frac{7}{13} \times 39$	M1	oe
	6, 12 and 21	A1	
24	Rotation	B1	
	90° clockwise	B1	
	(3, 4)	B1	

Q	Answer	Mark	Comments
25	Mid values seen	M1	210, 230, 250, 270, 290
	$210 (\times 1) + 230 \times 5 + 250 \times 6 + 270 \times 2 + 290 (\times 1)$ or $210 + 1150 + 1500 + 540 + 290$	M1	Allow one error
	$3690 \div 15$	M1	
	246	A1	
	4 hours 6 minutes	B1ft	257 minutes