

Paper 1MA1: 3F			
Question	Working	Answer	Notes
1		6000	B1 cao
2		5.25	B1 cao
3		8	B1 cao
4i ii		12 2 or 5	B1 cao B1
5		1.75l or 1750 ml	B1 for knowledge of 1 litre is 1000 millilitres P1 for adding their two amounts C1 for 1.75l or 1750 m/ (must include units)
6(a) 6(b)		8 35	B1 8 ±2mm B1 35 ±2°
7(a) 7(b) 7(c)		5 12 $a^5$	B1 cao B1 cao B1
8		Statement	C1 for a full explanation
9		-16, 32	P1 for $48 \div 6$ P1 for a complete process to find either A or B A1

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10		38 15	B1 cao P1 $(47-2) \div 3$ A1 cao
11(a)		7	B1 cao
11(b)		256	B1 cao
12		Yes with evidence	C1 for writing down at least two squares numbers P1 for adding square numbers A1 cao with supporting evidence
13		- 4 and - 10	M1 for repeated subtraction of 6 oe A1 - 4 A1 -10
14(a)		Angle marked	B1 cao
14(b)		Face shaded	B1 cao
14(c)		12	B1 cao
15		2	P1 for correct process to find fibre for 400g P1 for a complete process to find the fibre per slice A1 cao
16 (i) (ii) (iii)		3 options shown	C1 Diagram with decreased perimeter drawn  C1 Diagram with same perimeter drawn  C1 Diagram with increased perimeter drawn

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Question	Working	Answer	Notes
17(a)		70, 40 and 55	P1 for a method to find one of angles eg $(180 - 70) \div 2$ or 70 stated as the equal or $180 - 2 \times 70$ P1 for a method to find a angle A1 for 70, 40 and 55 ( any order)
17(b)	Explanation		C1 Explanation eg only one option once an obtuse angle given
18(a)		1:1.5	M1 for 40:(100-40) A1 cao
18(b)		$\frac{3}{4}$	B1
19	$3.69 \times 2 = 7.38$	19	P1 for 7.38 repeatedly added at least 6 times OR $50 \div 7.38$ P1 for $6 \times 7.38 + 3.69$ A1 19 boxes
20		Venn diagram	M1 for two overlapping and labelled ovals M1 for 2 and 6 in the intersection M1 for 5 and 7 in the universal set only C1 for a fully correct Venn Diagram

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Question	Working	Answer	Notes
21(a)		(4,10) Line drawn Positive Value between 60 and 70 Statement	B1 cao B1 Straight line drawn passing between (2,20) and (2,30) AND (13,86) and (13,94) C1 positive C1 a correct value given C1 for referring to the danger of extrapolation outside the given range or for a given point Eg line of best fit may not continue or full marks are hard to achieve no matter how much revision is done
21(b)(i)			
(ii)			
21(c)			
21(d)			
22		12.5 ≤ L < 13.5	B1 12.5 B1 13.5
23		$y = 2x + 1$	M1 for a method to find the gradient M1 for a method to find the c in $y = mx + c$ A1 $y = 2x + 1$ oe in this format
24(a)	$(720+408+304+252) \div 50$	33.68	M1 for finding 4 products fw consistently within interval (including end points) M1 (dep on 1st M) for $\Sigma fw \div 50$ A1 cao
24(b)		Manager with reasons	M1 for strategy to compare number of small size sold to number ordered C1 clear comparison that small size is not $\frac{3}{4}$ and so Jenny is not correct or the manager is correct

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25(a)  160 tiles 18 packs	18		M1 a full method to find the area of the trapezium M1 a full method to convert all areas to consistent units M1 for the area of the trapezium ÷ area of a tile M1 for communication of the number of whole packs required A1	
25(b)  176 tiles 20 packs	Supported statement	$(x - 1)(x + 4)$	P1 finding that 10% extra requires two more packs or 10% of 18 C1 Statement eg. increase in packs is 2 more which is more than 10%	
26			M1 $(x \pm 1)(x \pm 4)$ A1 $(x - 1)(x + 4)$ oe	
27	A and D	C1 in any order		
28		1.0625	P1 for a complete process to find the density of liquid A P1 for a complete process to find the mass of liquid C P1 for a complete process to find the density of liquid C A1 cao	