

Paper 1MA1: 1F			
Question	Working	Answer	Notes
1		32	B1
2		80	B1
3 a b c		28 1020 -8	B1 B1 B1
4 i ii		5 8	B1 B1
5 a b c		(4, 5) (1, 4) Correct line	B1 B1 B1
6		5.25 litres	P1 for start to process eg. $5 \div 2 (=2.5)$ P1 for complete process eg. $5000 + 2.5 \times 100$ A1 or 5250 ml

Paper 1MA1: 1F		Answer	Notes
Question	Working		
7 a b		$\frac{1}{4}$ PP PM PW MM MW WW	M1 For $\frac{x}{24}$ with $x < 24$ or $\frac{6}{y}$ with $y > 6$ A1 for $\frac{6}{24}$ oe M1 At least 3 correct combinations A1 Fully correct list with no extras or permutations
		15	M1 For start to scaling process eg $12 \div 8$ or $10 \div 8$ A1 15
8 9 a b c		15	M1 For using a correct common denominator A1 For $\frac{5}{14}$ oe
		$\frac{5}{24}$ $\frac{5}{14}$	B1
		$2\frac{2}{3}$	M1 for $\frac{4}{5} \times \frac{10}{3}$ oe A1 for $2\frac{2}{3}$ or $\frac{8}{3}$

Paper 1MA1: 1F				
Question	Working	Answer	Notes	
10 a b		-2	M1	For subtraction of 7 from both sides or division of all terms by 3 as first step of solution
		8	A1 M1 A1	cao For substitution $3 \times 6 - 2 \times 5$ cao
11		8, 12, 20 or 4, 8, 28 or 4, 12, 24 or 4, 16, 20	P1 A1	Adds 3 different multiples of 4
12		700	P1 P1 P1 A1	for process for total non-fiction books eg $\frac{1}{4} \times 80 (=20)$ process for total takings for non fiction eg $20 \times \frac{1}{2} \times 10 (=100)$ process to find total takings “100” + 60×10 700
13	£5	£5	P1 P1 A1	for $\frac{25}{100} \times 60$ for process to find difference between totals $20 - "15"$ cao

Paper 1MA1: 1F		Answer	Notes	
Question	Working			
14 a		chart	C1	For key or suitable labels to identify male and female
			C1	For linear scale
b			C1	For chart (combined or separate) correctly showing data for at least 2 of swim, run, cycle
		60	C1	Fully correct chart with axes correctly scaled and labelled.
15 a		32	B1	32 cao
		Correct reason	C1	Comment about grouped data in context
16		No with reason	M1 A1 C1	Starting reasoning $120 + 57 (= 177)$ Comparison of 177 with 180 Completes correct reasoning with reference to eg co-interior (or allied) angles total 180
17		35	M1 M1 A1	for method to find increase $108 - 80 (= 28)$ for method to find % increase eg $\frac{28}{80} \times 100$ cao

Paper 1MA1: 1F			
Question	Working	Answer	Notes
18		D: $15 - x$ P: $\frac{20+x}{2}$	M1 For writing a correct expression for D or P before sweets are eaten $20 - x$ or $20 + x$ A1 One correct expression A1 Both correct expressions
19 a		$y(y+27)$	B1
b		t^6	B1
c		w^5	B1
20	$16 \div 4$ $\frac{1 \times 4}{2} = 2$ or $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$ $\frac{2 \times 4}{2} = 4$ or $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ $\frac{1 \times 4}{2} + \frac{2 \times 4}{2} = 6$ or $\frac{1}{2} \times \frac{1}{4} + \frac{1}{2} \times \frac{1}{2} = \frac{3}{8}$ $16 - 6 = 10$ or $1 - \frac{3}{8} = \frac{5}{8}$	$\frac{5}{8}$	P1 Using side lengths of 4 P1 Method to find fraction or area for one unshaded triangle P1 Method to complete fraction or area for total unshaded region P1 Method to find total fraction or area for shaded region A1 for $\frac{5}{8}$ oe or 0.625

Paper 1MA1: 1F				
Question	Working	Answer	Notes	
21 a b	$\frac{1}{6} \times \frac{1}{5} \times 30 \times 5 = 5$ $(\frac{5}{6} \times \frac{1}{5} + \frac{1}{6} \times \frac{4}{5} + \frac{1}{6} \times \frac{1}{5}) \times 30 = 10$ $30 \times 1 - 5 = 10 \times 2$	5 Explanation	P1 P1 P1 A1	for identifying correct process to find probabilities for winning scores. May include use of tree diagram or sample space for correct process to find prize money for completing correct process to find profit cao
			C1	for appropriate comment to interpret result eg probability so only likelihood not certainty, other than 30 may play, £5 is small difference.
22		No with reasoning	M1 M1 A1 C1	Derive $AC=9$ cm and identify as hypotenuse $4^2 + 7^2$ for using eg $AC = \sqrt{4^2 + 7^2}$ or 65 and 81 for concluding explanation that ABC is not a right-angled triangle with evidence.
23		500g	P1 P1 A1 B1	$\frac{1}{2} \times 160 (=20)$ $'20' \times 25$ 500 (or 0.5) Correct units g (or kg)
24 (a) (b)		72	B1	cao
		65	B1	cao

Paper 1MA1: 1F		Answer	Notes
Question	Working		
25		$2^3 \times 3^2 \times 7$	M1 for at least 3 correct divisions by a prime factor (may be seen in a factor tree) M1 for 2, 2, 2, 3, 3, 7 (condone inclusion of 1); may be seen in a factor tree A1