Paper 1MA1: 1F				
Question		**Working**	**Answer**	**Notes**
1			32	B1
2			80	B1
3	a		28	B1
	b		1020	B1
	c		−8	B1
4	i		5	B1
	ii		8	B1
5	a		(4, 5)	B1
	b		(1, 4)	B1
	c		Correct line	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			
Question	Working	Answer	Notes
7 a		$\frac{1}{4}$	M1 For $\frac{x}{24}$ with $x < 24$ or $\frac{6}{y}$ with $y > 6$ A1 for $\frac{6}{24}$ oe
b		PP PM PW MM MW WW	M1 At least 3 correct combinations A1 Fully correct list with no extras or permutations
8		15	M1 For start to scaling process eg 12÷8 or 10÷8 A1 15
9 a		$\frac{5}{24}$	B1
b		$\frac{5}{14}$	M1 For using a correct common denominator A1 For $\frac{5}{14}$ oe
c		$2\frac{2}{3}$	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		−2	M1	For subtraction of 7 from both sides or division of all terms by 3 as first step of solution
			A1	cao
b		8	M1	For substitution $3 \times 6 - 2 \times 5$
			A1	cao
11		8, 12, 20 **or** 4, 8, 28 **or** 4, 12, 24 **or** 4, 16, 20	P1	Adds 3 different multiples of 4
			A1	
12		700	P1	for process for total non-fiction books eg $\frac{1}{4} \times 80$ (=20)
			P1	process for total takings for non fiction eg $20 \times \frac{1}{2} \times 10$ (= 100)
			P1	process to find total takings "100" + 60 × 10
			A1	700
13	£5	£5	P1	for $\frac{25}{100} \times 60$
			P1	for process to find difference between totals 20 − "15"
			A1	cao

Paper 1MA1: 1F			
Question	**Working**	**Answer**	**Notes**
14 a		chart	C1 For key or suitable labels to identify male and female C1 For linear scale C1 For chart (combined or separate) correctly showing data for at least 2 of swim, run, cycle C1 Fully correct chart with axes correctly scaled and labelled.
b		60	M1 $\frac{8+5+5}{30}$ or ft their diagram A1 60%
15 a		32	B1 32 cao
b		Correct reason	C1 Comment about grouped data in context
16		No with reason	M1 Starting reasoning 120 + 57 (= 177) A1 Comparison of 177 with 180 C1 Completes correct reasoning with reference to eg co-interior (or allied) angles total 180
17		35	M1 for method to find increase 108 – 80 (= 28) M1 for method to find % increase eg $\frac{28}{80} \times 100$ A1 cao

Paper 1MA1: 1F				
Question	**Working**	**Answer**		**Notes**
18		D: $15 - x$ P: $\frac{20+x}{2}$	M1 A1 A1	For writing a correct expression for D or P before sweets are eaten $20 - x$ or $20 + x$ One correct expression 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 P1 P1 P1 A1	Using side lengths of 4 Method to find fraction or area for one unshaded triangle Method to complete fraction or area for total unshaded region Method to find total fraction or area for shaded region for $\frac{5}{8}$ oe or 0.625

Paper 1MA1: 1F			
Question	Working	Answer	Notes
21 a	$\frac{1}{6} \times \frac{1}{5} \times 30 \times 5 = 5$ $(\frac{5}{6} \times \frac{1}{5} + \frac{1}{6} \times \frac{4}{5} + \frac{1}{6} \times \frac{1}{5}) \times 30 = 10$ $30 \times 1 - 5 - 10 \times 2$	5	P1 for identifying correct process to find probabilities for winnng scores. May include use of tree diagram or sample space P1 for correct process to find prize money P1 for completing correct process to find profit A1 cao
b		Explanation	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 Derive AC=9 cm and identify as hypotenuse M1 $4^2 + 7^2$ A1 for using eg $AC = \sqrt{4^2 + 7^2}$ or 65 and 81 C1 for concluding explanation that ABC is not a right-angled triangle with evidence.
23		500g	P1 $\frac{1}{8} \times 160$ (=20) P1 '20' × 25 A1 500 (or 0.5) B1 Correct units g (or kg)
24 (a)		72	B1 cao
(b)		65	B1 cao

Paper 1MA1: 1F			
Question	**Working**	**Answer**	**Notes**
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