Paper: 1MA1/3F						
Question	Working	Answer	Mark	Notes		
15 (a)		Venn Diagram	B1	for labels on diagram		
	\parallel $_{A}$		M1	for just 15 in the intersection		
			M1	for just 5 and 25 in only set B or just 3, 9, 21 and 27 in only set A or just 1, 7, 11, 13, 17,		
	$\left \left(3, 9, \left(15 \right) 5, 25 \right) \right $			$19, 23, 29 \text{ in } (A \cup B)'$		
	$ \langle 21, 27 \rangle $		C1	for all numbers correctly placed in the Venn Diagram		
Q1	1,7,11,13,17,19,23,29			Ignore all entries except the region you are marking for each method mark		
(b)		$\frac{7}{15}$	P1	ft for $\frac{"7"}{a}$ where $a \ge "7"$ or $\frac{b}{"15"}$ where $b \le "15"$		
			A1	ft $\frac{7}{15}$ oe		

Paper: 1MA1/2F					
Question	Answer	Mark	Mark scheme	Additional guidance	
20 (a)	Venn diagram	C4	fully correct Venn diagram		
		(C3	7 of the 8 regions correct or for a diagram with only one number incorrectly placed)	$ \begin{array}{ c c } \hline \begin{pmatrix} 2, 10, & 6 \\ 14 & 8 \\ 20 \end{pmatrix} $	
Q2		(C2	5 or 6 of the 8 regions correct)	4, 12 18, 22 16, 24	
Q2		(C1	3 or 4 of the 8 regions correct)		
(b)	1/12	M1	ft for identification of 1 or 12 eg from the diagram	Need not be written as a fraction or probability at this stage. eg could be a ratio 1:12	
		A1	ft oe	Acceptable equivalents are (eg, could ft) any fraction equivalent to $\frac{1}{12}$, 0.08(33) or 8(.33)%	

Paper: 1MA1/1F					
Question	Answer	Mark	Mark scheme	Additional guidance	
18 (a)	15, 17, 19, 20, 21, 23, 25	M1	for listing either set eg 15,20,25 or 15,17,19,21,23,25 with no incorrect numbers	The 'lists' may be seen in a Venn Diagram or in the working space in part (b) provided they are not contradicted by incorrect lists in part (a)	
Q3		A1	15,17,19,20,21,23 and 25 with no repeats	If repeats (but no incorrect numbers) award M1 only.	
(b)	Statement or 15 and 25	C1	eg odd multiples of 5 (between 14 and 26) oe NB Could be a general description, eg numbers that are in both (A and B), or 15 and 25 (ft from their sets A and B in part (a)) or numbers ending in 5 (between 14 and 26)		

Paper: 1MA1/3F					
Question	Answer	Mark	Mark scheme	Additional guidance	
20	Venn Diagram	B1	for labelling diagram, accept "multiples of 3" and "even numbers" for labels	Ignore all entries except the region you are marking for each method mark	
		M1	for correct numbers in at least one region	$A \longrightarrow B$	
Q4		M1	for correct numbers in at least two regions	$\begin{pmatrix} A & & & \\ $	
		A1	for all regions correct	1 5 7 11 13	

Paper: 1MA1/3F					
Question	Answer	Mark	Mark scheme	Additional guidance	
24 (a)	6,9	M1	for 6, 9 in the intersection only	Ignore all entries except the region you are marking for each method mark	
Q5	1,5,8 2 3, 4,7	M1	for 1, 5, 8 in set A only or 2 in set B only or 3, 4, 7 in set $(A \cup B)'$ only	1, 5, 8 6 2	
Q3		C1	for all numbers correctly placed in the Venn Diagram	3, 4, 7	
(b)	$\frac{2}{9}$	M1	ft for identification of 2 or 9 or ft diagram	Need not be written in correct form at this stage eg could be a ratio 2:9 Repeated digits in the diagram should be counted as 2 elements	
		A1	$\frac{2}{9}$ oe or ft diagram	Accept any equivalent fraction, decimal form 0.22(22) or percentage form 22(.22)%	

Paper: 1MA1/2F					
Question	Answer	Mark	Mark scheme	Additional guidance	
22 (a)	Venn diagram	M1	for correct numbers in at least one region	Ignore all entries except the region you are marking for each method mark	
		M1 A1	for correct numbers in at least two regions for all regions correct	$(4, 6, 8 \begin{pmatrix} 2 & 1 \\ 10 & 5 \end{pmatrix})$	
(b) Q6	2 10	M1	for $\frac{a}{10}$ where $0 < a < 10$ and a is an integer or $\frac{2}{b}$ where $b > 2$ and b is an integer or ft diagram	3, 7, 9 Need not be written in correct form at this stage eg could be a ratio 2:10 Repeated digits in the diagram should be counted as 2 elements	
		A1	$\frac{2}{10}$ oe or ft diagram	Accept any equivalent fraction, decimal form 0.2 or percentage form 20%	

Paper: 1MA1/1F					
Question	Answer	Mark	Mark scheme	Additional guidance	
21	Venn Diagram	C1	for one correct region	(0) 4 8 10 16	
		C1	for two correct regions	12 6 2	
Q7		C1	for all regions correct	$\begin{array}{ c c c c c c }\hline & & & & & & & & \\ \hline & & & & & & & & \\ \hline & & & &$	
				Ignore all entries except the region you are marking for each mark	