Paper 1MA	Paper 1MA1: 1F						
Question	Working	Answer	Mark	Notes			
11 (a)	30 ÷ 8	4	P1	for $30 \div 8$ or 3.75 or 3 or counting up 8s towards 30 to at least 3 lots of 8 or $4 \times 8 (=32)$ oe			
Q1			A1	cao			
(b)		No with reason	C1	No with $32 \div 8$ or ft from (a)			

Paper: 1MA1/3	Paper: 1MA1/3F						
Question	Working	Answer	Mark	Notes			
1 (a)		Don, Mersey,	B1	accept 112, 113, 297, 346, 354			
		Trent, Thames,					
Q2		Severn					
(b)		Shown	C1	shown with correct values eg $(112 \times 3 =) 336$ (and 346) or $112 + 112 + 112 + 10 = 346$ or $346 \div 3 = 115(.3)$ (and 112) or $346 \div 112 = 3.089$ oe			

Paper: 1MA1/	Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance				
Q3	Yes (supported)	P1 P1 C1	starts process to find the number of tins or meals needed, eg $2 \times \frac{1}{4} \left(= \frac{2}{4} = \frac{1}{2} \right)$ or $14 \times \frac{1}{4} \left(= \frac{14}{4} \text{ oe} \right)$ or $2 \times 14 \left(= 28 \right)$ or $8 \div 2$ or to find the number of meals from 8 tins, eg $8 \div \frac{1}{4} \left(= 32 \right)$ a complete process to find the number of tins needed, eg $14 \times \frac{2}{4} \left(= 7 \right)$ or $8 \div 2$ and " $\frac{14}{4}$ " OR to find the numbers of meals $8 \div \frac{1}{4} \left(= 32 \right)$ and $2 \times 14 \left(= 28 \right)$ or $8 \div \frac{2}{4} \left(= 16 \right)$ 'Yes' from a comparison of correct values, eg 7 (and 8) or 32 and 28 or 16 (and 14) or $\frac{14}{4}$ and 4	Numbers may be expressed in decimal form Correct working needs to be accompanied by a statement confirming enough food has been bought.				

Paper: 1MA1/2F								
Answer	Mark	Mark scheme	Additional guidance					
2 bags of stone	P2	for a complete process to work out how many bags of each material is required eg $180 \div 25$ (= 7.2 or 8), $375 \div 22.5$ (= 16.6 or 17), $1080 \div 50$ (= 21.6 or 22)	The correct figures do not need to be seen to award the process marks					
		or a complete process to work out the total weight of each element that he has eg 25×10 (= 250), 20×22.5 (= 450), 50×20 (= 1000)						
	(P1	for a correct start to the process, eg for at least one correct calculation						
	C1	correct conclusion eg 2 bags of stone, with no incorrect working						
	Answer	Answer Mark 2 bags of stone P2 (P1	AnswerMarkMark scheme2 bags of stoneP2for a complete process to work out how many bags of each material is required eg $180 \div 25$ (= 7.2 or 8), $375 \div 22.5$ (= 16.6 or 17), $1080 \div 50$ (= 21.6 or 22)or a complete process to work out the total weight of each element that he has eg 25×10 (= 250), 20×22.5 (= 450), 50×20 (= 1000)(P1for a correct start to the process, eg for at least one correct calculation					

Paper: 1MA1	Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance				
13 Q5	3	P1	for a start to the process eg $240 - (2 \times 45) (= 150)$ oe or $(2 \times 45) + 40 (= 130)$ oe for complete process eg "150" \div 40 (= 3.75) – can be implied by $40 + 40 + 40 = 120$ or "130" $+$ 40 $+$ 40 (= 210)	Considering just one piece of 45 cm is not a misread but $(240 - 45) \div 40$ (= 4.875) oe should be awarded P1 only				
		A1	cao					

Paper: 1MA1	Paper: 1MA1/3F							
Question	Answer	Mark	Mark scheme	Additional guidance				
⁷ Q6	24	M1 A1	for a complete method eg $6 \times 2 \times 2$ or sight of 6 , 2 , 2 ready for calculation, or with the wrong operation cao	Could be seen as two separate calculations SC:B1 for a answer of 1.5 oe				

Paper: 1MA1	Paper: 1MA1/2F							
Question	Answer	Mark	Mark scheme	Additional guidance				
10 Q7	1635	P1	for process to find length of time in car park eg $8.40 \div 0.024$ (= 350) or 0.024×60 (= 1.44) and $8.40 \div "1.44"$ (= 5.833) for process to add "350" minutes to 10 45 eg $10.45 + 60 + 60 + 60 + 60 + 60 + 50$ or $10.45 + "5$ hours 50 minutes" OR for 435	Do not accept incorrect interpretation of time, eg 5.83 = 5 hours 83 minutes				
		A1	for 1635 or 435 pm	Accept 1635 pm				

Paper: 1MA1	Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance			
12	6	P1	process to find the weight of small boxes eg 3×450 (=1350)				
Q8		P1	complete process to find the number of large boxes, eg $(5850 - "1350") \div 750$ or $5850 - "1350"$ (=4500) and 6×750 (=4500)				
		A1	cao	Cannot award this mark if 6 comes from a rounded value due to error in calculating			

Paper: 1MA1	Paper: 1MA1/3F							
Question	Answer	Mark	Mark scheme	Additional guidance				
7	6	M1	for interpreting the table to find the number of green counters $(26 + 7 (= 33))$ or the number of red counters $(16 + 11 (= 27))$	33 - 27 = 6 $10 - 4 = 6$				
Q9			or the difference in circles $(26 - 16 (=10))$ or squares $(11 - 7 (=4))$					
		A1	cao					

Paper: 1MA1	Paper: 1MA1/1F								
Question	Answer	Mark	Mark scheme	Additional guidance					
10 Q10	660	P1	for a process to work out the number of large marbles eg 12 ÷ 4 (=3) or the number of small marbles eg 12 – [number of large marbles] or 12 × (1- ½) (=9) (dep) for a process to work out the weight of large marbles eg "3" × 70 (=210) or to work out the weight of small marbles eg "9" × 50 (=450)	[number of large marbles] could come from an incorrect method for finding $\frac{1}{4}$ of 12					
		P1 A1	for a complete process eg $(12\div4)\times70+12\times(1-\frac{1}{4})\times50$ oe cao						

Paper: 1MA1/2F							
Question	Answer	Mark	Mark scheme	Additional guidance			
13 Q11	19	P1	for 4275 ÷ 28 (= 152(.678)) or 153 or a build up to at least 150 × 28 (=4200) for "152" × 28 (= 4256) or "153" × 28 (=4284) or ("152.678" – 152) (=0.678) or 4275 ÷ "152" – 28(= 0.125) or 4275 – "4200" (=75) oe	Division may be seen as a build up method Use of 150× 28 or better for "4200"			
		A1	cao				

Paper: 1MA1	Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance				
7	14	M1	for 42 ÷ 3					
Q12		A1	cao					

Paper: 1MA1/1F								
Question	Answer	Mark	Mark scheme	Additional guidance				
Q13	7	P1	for process to find temperature on Wednesday, eg $5 - 10 + 3$ (= -2) or $-10 + 3$ or $10 - 3$ for 7, accept -7	Be aware of correct use of a number line				

Paper: 1MA1	Paper: 1MA1/2F							
Question	Answer	Mark	Mark scheme	Additional guidance				
7 Q14	780	P1 P1 A1	for 2500 – 940 (= 1560) or 2500 ÷ 2 (=1250) and 940 ÷ 2 (=470) for "1560" ÷ 2 or "1250" – "470" cao	Additional guidance				

Paper: 1MA1/3F							
Question	Answer	Mark	Mark scheme	Additional guidance			
7	29	P1	for a start to a process, eg. (total apples =) $86 + 75 + 92$ (= 253) or (total oranges =) $68 + 80 + 76$ (= 224)				
			or differences each week, eg. (week 1) 86 – 68 (= 18) or (week 2) 75 – 80 (= – 5) or (week 3) 92 – 76 (= 16)				
		P1	for complete process, eg "253" – "224" or "18" + "– 5" + "16"				
Q15		A1	cao				

Paper: 1MA	Paper: 1MA1/3F							
Question	Answer	Mark	Mark scheme	Additional guidance				
11	Yes (supported)	M1	for 48×3 (=144) or 35×4 (= 140) or $48 \div 4$ (=12)					
Q16	(supported)	M1	for 48 × 3 (=144) and 35 × 4 (= 140) or "140" ÷ 48 (=2.9) or "140" ÷ 3 (=46.6) or "12" × 3 (=36) or "144" ÷ 4 (=36) or "144" ÷ 35 (=4.1)					
		C1	for Yes with 144 and 140 OR 36 OR 2.9 OR 4 (spare) OR 4.1 (each frame) OR 46.6 (in each box)					

Paper: 1MA1	Paper: 1MA1/2F							
Question	Working	Answer	Mark	Notes				
4 (a)		6	P1	for process to find the total weight of one type of fruit eg 4×125 (=500) or 2×170 (=340) or 3×135 (=405) or 1245				
	1785-1245 =540		P1	complete process to find the total weight of oranges eg "1785" – ("500" + "340" + "405") or sight of digits 54 or answer given as 0.6 or 60				
Q17	540 ÷ 90		A1	cao				
				SC B1 for answer of 15				
(b)(i)		No	P1	Starts process, eg $1000 \div 75$ (digits $13(.3)$ seen) or 15×75 (= 1125) or 1.125 or showing $1000 \div 15$ (=66(.6)) or counts to 975 or 1050				
		(supported)	C1	"No" with correct working eg as evidenced by work from P1 mark.				
(b)(ii)		Comment	C1	for valid comment, eg may get enough tomatoes if tomatoes weigh less than assumed (75g), not if weight is more than 75g.				

Paper 1MA1: 2F							
Question	Working	Answer	Mark	Notes			
18		Yes (supported)	P1	for process to work out the total number of children, e.g. 117 × 4 (= 468)			
		(supported)	P1	(dep P1) for process to work out total number of adults or the total number of people, e.g. " 468 " \times 5 \div 2 (= 1170) or " 468 " \times 7 \div 2 (= 1638)			
			A1	for 1170 or 1638			
			P1	for process to work out the percentage of theatre full, "468"+"1170"			
				e.g. $\frac{"468" + "1170"}{2600} \times 100 $ (= 63) or for a process to work out 60% of 2600 (= 1560)			
			C1	for a correct conclusion supported by correct figures e.g. 63% or 1560 and 1638			
Q18			P1	OR for a process to work out 60% of 2600, eg. $\frac{60}{100} \times 2600$ (= 1560)			
			P1	(dep P1) for process to work out total number of children, e.g. "1560" \times 2 \div 7 (= 445(.7)			
			A1	for 445(.7)			
			P1	for process to work out number of children in the circle, eg. "445(.7)" ÷ 4 (= 111 to 112)			
			C1	for a correct conclusion supported by correct figures e.g. 111 to 112			
				[Where appropriate, accept rounded or truncated values]			

Paper: 1MA1/3F								
Question Answer Mark			Mark scheme	Additional guidance				
10 (a)	80	B1	cao					
(b)	8	B1	cao					
(c) Q19	Yes and reason	C1	for yes and reason Acceptable examples Yes, because 27 is greater than 7 Yes, because the drop is 20 more Yes, the gradient is steeper (in the first 3 mins) and is then less steep (in the last 3 mins) Yes, because the drop is 20 less in the last 3 mins	"Yes" may be implied from wording Ignore any references to actual readings from the graph				
			Yes, because the drop is more Not acceptable examples No Yes, because the drop is 20 less					

Paper: 1MA1/3F								
Question	Answer	Mark	Mark scheme	Additional guidance				
26 (a)	Yes (supported)	P1	for start of process, eg $5 \times 9 \ (= 45)$ or $10 \times 14 \ (= 140)$ or $5 \times 2 \ (= 10 \ (kg))$ or $3 \div 2 \ (= 1.5 \ (boxes))$	Accept values rounded or truncated to 1 dp in both (a) and (b). Ignore units				
		P1	for process using ratio of areas, eg "140" \div "45" (= 3.1) or for using ratio of amount of seed eg "10" \div 3 (= 3.3) or for finding coverage for 1 kg of grass seed, eg "45" \div 3 (=15 (m ²))					
		P1	for process to find amount of seed needed, eg "140" ÷ "45" × 3 (= 9.3kg)	Accept 9.4				
Q20			or "140" ÷ "45" × "1.5" (= 4.6(boxes)) oe or "15" × 2 (= 30 (m² per box)) and "140" ÷ "30" (= 4.6(boxes)) or for process to find area that can be seeded, eg "10" ÷ 3 × "45" (= 150 (m²))	Accept 4.7				
		C1	or "140" ÷ "10" (= 14 (m²)) oe for "Yes" supported by correct figures eg 4.6(and 5), or 9.3and 10 or 150 and 140 (or 140 to 148.5) or 15 and 14					
(b)	Yes, (does not have enough) (supported)	C1	for reasoning supported with correct figures, eg does not have enough seed and compares 9 (kg) with 9.3(kg) or 4.5 (boxes) with 4.6 (boxes) or 135 (m²) with 140 (m²) or 14 (m²) with 15 (m²) ft from (a)	Values used in (a) do not need repeating in (b) as long as intention is clear				