Paper 1MA	Paper 1MA1: 1F				
Question	Working	Answer	Mark	Notes	
16 (a)		Explanation	C1	eg States over-estimated for both values	
(b)		182.7(0)	P1	for a process to find 10% of a value stated in the question eg $\frac{10}{100}$ ×5.80 (=0.58) or $\frac{10}{100}$ ×35 (=3.5) oe or 35 × 5.80 (=203), allow 30 × 5.80 (=174) or 35 × [reduced price]	
Q1			P1	for a process to find 90% of a value stated in the question eg 35 – "3.5" (=31.5) or $0.9 \times 5.80$ (=5.22) oe or $\frac{10}{100} \times$ "203" (=20.3) or $\frac{10}{100} \times$ "174" (=17.4) oe	
			P1	for a complete process to find actual cost of 35 eg $0.9 \times 5.80 \times 35$ oe	
			A1	cao	
				SC B2 156.6(0)	

Paper: 1MA1	Paper: 1MA1/3F						
Question Answer Mark		Mark scheme	Additional guidance				
11 (a)	241.56	P1	for difference for 1 parcel eg $35.38 - 15.25$ (= 20.13) <b>OR</b> for total cost for 12 parcels by either service eg $35.38 \times 12$ (= 424.56) <b>or</b> $15.25 \times 12$ (= 183)				
Q2		P1 A1	for a complete process eg "20.13" × 12 <b>or</b> "424.56" – "183" cao				
(b)	Explanation	C1	for explanation  Acceptable examples both figures rounded down (refers to both figures) 20 is less than 21 and 15 is less than 15.25  Not acceptable examples both figures rounded (up); rounded down either 20 is less than 21 or 15 is less than 15.25 (refers to just one figure) the cost is 320.25 (more than 300); multiplying with bigger numbers				

Paper: 1MA1	/1F			
Question	Answer	Mark	Mark scheme	Additional guidance
18	4550 to 4800	M1	for rounding at least two figures to 800, 50, 300 or 290 (which could be evidenced through partial calculation)	Any attempt to find the exact answer gets NO marks even if followed by rounding
Q3		M1	(dep) for a correct calculation using their rounded values eg. sight of 240000 (= $800 \times 300$ ) or 232000 (= $800 \times 290$ ) or 229100 (= $790 \times 290$ )	Various operations possible
			or $16 (= 800 \div 50)$ or $15.8 = (790 \div 50)$	
			or $6 (= 300 \div 50)$ or $5.8 = (290 \div 50)$	
		A1	for answer in range 4550 to 4800	

Paper: 1MA1/1F					
Question	Answer	Mark	Mark scheme	Additional guidance	
15 (a)	180	M1	rounds one figure appropriately 92 to 90 or 100 <b>or</b> 1.63 to 2 or 1.5 or 1.6 or 1.7		
Q4		A1	for $180 = 90 \times 2$ or $135 = 90 \times 1.5$ or $144 = 90 \times 1.6$ or $153 = 90 \times 1.7$ or $200 = 100 \times 2$ or $150 = 100 \times 1.5$ or $160 = 100 \times 1.6$ or $170 = 100 \times 1.7$ or $163 = 100 \times 1.63$	Answer of 149.96 (92 × 1.63) gets M0A0	
			or 184 (= 92 × 2) or 138 (= 92 × 1.5) or 147.2 (= 92 × 1.6) or 156.4 (= 92 × 1.7)	Answer with no working gets M0A0 Ignore further rounding of their result	
(b)	947.2	B1	cao		

Paper 1MA	Paper 1MA1: 1F				
Question	Working	Answer	Mark	Notes	
Q5		Ami	M2	for an approximate calculation $e_{\overline{16+5}}^{\underline{600}} = \frac{\mathbf{or} \cdot 600}{21} = \frac{\mathbf{or} \cdot 600}{20} = \frac{\mathbf{or} \cdot 600}{20+5} = \frac{\mathbf{or} \cdot 600}{25} = \frac{\mathbf{or} \cdot 600}{25} = \frac{\mathbf{or} \cdot 600}{25+5} = \frac{\mathbf{or} \cdot 600}{30} = \frac{\mathbf{or} \cdot 600}{30} = \frac{\mathbf{or} \cdot 600}{25} = \frac{\mathbf{or} \cdot 600}{25+5} = \frac{\mathbf{or} \cdot 600}{30} = \frac{\mathbf{or} \cdot 600}{30} = \frac{\mathbf{or} \cdot 600}{25+5} = \frac{\mathbf{or} \cdot 600}{25+5} = \frac{\mathbf{or} \cdot 600}{25+5} = \frac{\mathbf{or} \cdot 600}{30} = \frac{\mathbf{or} \cdot 600}{25+5} = \frac{\mathbf{or} \cdot$	
		with estimate (M1 C1		for using 600 <b>or</b> 5 <b>or</b> 4)  Ami's answer /27.1115 is closest with accurately calculated figure from approximation	