

Topic Test 1 Mark Scheme

Rounding - Higher

Q	Answer	Mark	Comments
1(a)	30 350	B1	
1(b)	30 449	B1	
2	495 or 505 seen	M1	
	2020	A1	
3	$0.445 \leq \text{length} < 0.455$	B2	B1 1 correct bound with correct inequality or both bounds correct with no or incorrect inequalities Accept any variable for length
4	173 or 177 seen	M1	
	4	A1	Must come from correct work
5	245, 246, 247, 248, 249	B2	B1 245 to 254 seen or 150 to 249 seen or correct answer with one extra
6	$24 \leq \text{age} < 25$	B2	B1 1 correct bound with correct inequality or both bounds correct with no or incorrect inequalities Accept any variable for age

Q	Answer	Mark	Comments
7	149.5 or 150.5 seen	M1	
	$\frac{150 - \text{their } 149.5}{150} (\times 100)$ or $\frac{\text{their } 150.5 - 150}{150} (\times 100)$	M1dep	
	0.33(...)	A1	
8	195.55 or 195.65 seen or 150.15 or 150.25 seen	M1	
	45.5	A1	Must come from correct work
9	Alternative method 1		
	11.5 or 12.5 or 0.245 or 0.255 seen	B1	
	their lower container limit ÷ their upper bottle limit or 11.5 ÷ 0.255	M1	eg 11.5 ÷ 0.254 but must be an attempt at a limit.
	45	A1ft	ft if M awarded and value truncated to a whole number
	Alternative method 2		
	11.5 or 12.5 or 0.245 or 0.255 seen	B1	
	0.255 × 45 = 11.475 and 0.255 × 46 = 11.73	M1	
	45	A1	