

Q	Answer	Mark	Comments
1	4.715 or 4.725 or 157.5 or 158.5	B1	accept $4.724\dot{9}$ or 4.7249... accept $158.4\dot{9}$ or 158.49...
	their 4.725 ÷ their 157.5	M1	their 4.725 must be (4.72, 4.725] their 157.5 must be [157.5, 158)
	0.03 and correct working	A1	oe eg $\frac{3}{100}$
	Additional Guidance		
	Answer 0.03 with no correct working		B0M0A0
	4.7249 exact value with no continuation dots seen		B0

2	Alternative method 1		
	Sight of at least one of 2.35 or 2.45 or 2.85 or 2.95	M1	allow $2.44\dot{9}$ for 2.45 and $2.94\dot{9}$ for 2.95
	their $2.35 \times$ their 2.85	M1	$2.3 \leq \text{their } 2.35 < 2.4$ $2.8 \leq \text{their } 2.85 < 2.9$
	2.35×2.85 selected and 6.6(975)	A1	accept 6.7(0) or 6.698 with 2.35×2.85 selected
	Alternative method 2		
	Sight of at least one of 2.35 or 2.45 or 2.85 or 2.95	M1	allow $2.44\dot{9}$ for 2.45 and $2.94\dot{9}$ for 2.95
	$6.51 \div$ their 2.35 or $6.51 \div$ their 2.85	M1	$2.3 \leq \text{their } 2.35 < 2.4$ $2.8 \leq \text{their } 2.85 < 2.9$
	$6.51 \div 2.35$ and 2.7(7...) and 2.85 or $6.51 \div 2.85$ and 2.2(8...) and 2.35	A1	
	Additional Guidance		
	Alt 1 2.35×2.85 amongst other calculations eg 2.45×2.95 and/or 2.35×2.95 can still score the second M1 but it must be clear that they are considering $2.35 \times 2.85 = 6.6(975)$ to show that the bedroom can be rented eg1 $2.35 \times 2.85 = 6.6975$ $2.45 \times 2.95 = 7.2275$ eg2 $2.35 \times 2.85 = 6.6975$ $2.45 \times 2.95 = 7.2275$ $2.35 \times 2.95 = 6.9325$ The lower bounds show it can be rented		M1M1A0 M1M1A1
	Ignore the calculation 2.4×2.9 throughout		
	Alt 1 6.6(975) or 6.7 or 6.698 without 2.35×2.85 selected		A0
	6.6975 only		M0M0A0
	Alt 2 2.7(7...) without $6.51 \div 2.35$ and 2.85 seen		A0
	Alt 2 2.2(8...) without $6.51 \div 2.85$ and 2.35 seen		A0

Q	Answer	Mark	Comments
3	$3.55 \leq \text{mass} < 3.65$	B1	

Q	Answer	Mark	Comments
4	64.5 or 65.5 or 25 or 35	M1	allow $65.4\dot{9}$ or $34.\dot{9}$ implied by 4160.25 or 4290.25 or 8320.5 or 8580.5 or 625 or 1225
	$2 \times \text{their } 65.5^2 - \text{their } 25^2$ or $2 \times 4290.25 - 625$ or $8580.5 - 625$	M1	their 65.5 must be (65, 66] their 25 must be [20, 30)
	65.5 and 25 and 7955.5	A1	
	Additional Guidance		
	Up to M2 may be awarded for correct work with no answer or incorrect answer, even if this is seen amongst multiple attempts		
	If multiple attempts are seen and one is fully correct, the correct one must be unambiguously selected (eg ticked or circled) to award A1 if the answer line is blank		
	Note that M0M1A0 is possible eg $2 \times 66^2 - 21^2$		M0M1A0
	Condone eg 65.50 for 65.5		

Q	Answer	Mark	Comment
5	7.15 or 7.25 or 13.55 or 13.65 or 109.5 or 110.5	B1	
	7.25 and 13.65 and 109.5 chosen	B1	
	$0.5 \times \text{their } 7.25 \times \text{their } 13.65 \times \sin$ their 109.5	M1	their 7.25 must be [7.2, 7.25] their 13.65 must be [13.6, 13.65] their 109.5 must be [109.5, 110] or 110.5
	46.6(4...) with correct bounds seen	A1ft	condone 47 with B1B1 scored ft their three bounds within M1 ranges which are not 7.2 or 13.6 or 110
	Additional Guidance		
	Accept 7.249 for 7.25 or 13.649 for 13.65 or 110.49 for 110.5		
	7.25 and 13.65 and 110.5 used and answer 46.3...		B1B0M1A1ft
	7.25 and 13.65 and 110 used and answer 46.497... or 46.5		B1B0M1A0ft
	7.2 and 13.6 and 110 used, with or without answer 46(.0...)		B0B0M1A0ft
	46.6(4...) or 47 with no working		B0B0M0A0