

Q	Answer	Mark	Comments
1	2 (cm) and 8 (cm) seen or [3.54, 4.56] or 3 ÷ [1.8, 2.2] or [1.36, 1.67] or [1.8, 2.2] ÷ 3 or [0.6, 0.74]	M1	each ± 2 mm implied by whale divided into four sections or $\frac{1}{4}$ of the whale oe
	[10.6, 13.7]	A1	working for M1 must be seen SC1 [10.6, 13.7] with no or insufficient working
	Additional Guidance		
	2:8 and 3:12 on answer line		M1A0

Q	Answer	Mark	Comments
2	Alternative method 1 Using the given values		
	$4.2 \div 7$ or 0.6 or $7 \div 4.2$ or 1.66... or 1.67 or $2.5 \div 7$ or 0.357... or 0.36 or $7 \div 2.5$ or 2.8	M1	implied by $1 \rightarrow 0.6$ or $0.5 \rightarrow 0.3$
	$2.5 \times 4.2 \div 7$	M1dep	oe eg $2.5 \div (7 \div 4.2)$ or $2.5 \div 1.67$ or $4.2 \div (7 \div 2.5)$ or $4.2 \div 2.8$ or full build-up eg $0.6 + 0.6 + 0.3$ or 0.3×5 or $4.2 \div 2 = 0.6$
	1.5	A1	oe fraction or decimal SC2 answer with digits 15
	Alternative method 2 Working consistently in centimetres		
	$4.2 \times 100 \div 7$ or 60 or $7 \div (4.2 \times 100)$ or 0.0166... or 0.0167 or $2.5 \div 7$ or 0.357... or 0.36 or $7 \div 2.5$ or 2.8	M1	oe eg $420 \div 7$ or $7 \div 420$ implied by $1 \rightarrow 60$ or $0.5 \rightarrow 30$
	$2.5 \times 420 \div 7$ or 150	M1dep	oe eg $2.5 \div (7 \div 420)$ or $2.5 \div 0.0167$ or $420 \div (7 \div 2.5)$ or $420 \div 2.8$ or full build-up eg $60 + 60 + 30$ or 30×5 or $420 \div 2 = 60$
	1.5	A1	oe fraction or decimal SC2 answer with digits 15

2 cont	Additional Guidance	
	Up to M1 may be awarded for correct work with no, or incorrect answer, even if this is seen amongst multiple attempts	
	Answer 1.5 with no working	M2A1
	150 is M2A0 but Answer 150 cm with m crossed out would be M2A1	
	4.2 : 1.5 or 420 : 150	M2
	For consistent working in millimetres or metres apply the principles of Alt 2	
	Incorrect or inconsistent change of units must be recovered for M2A0 or M2A1, otherwise score 0 or SC2 eg1 $42 \div 7 = 6$, $6 \times 2.5 = 15$, Answer 1.5 (units recovered) eg2 $4200 \div 7 = 800$, $800 \times 2.5 = 2000$, Answer 2 (arithmetic slip but method shown and units recovered) eg3 $42 \div 7 = 6$, $6 \times 2.5 = 15$, Answer 15 (units never recovered)	M2A1 M2A0 SC2
	NB Correct values from incorrect methods eg1 $7 - 4.2 = 2.8$ with no other creditworthy work eg2 $2.5 \div 4.2 = 0.6$ (1 dp) with no other creditworthy work	M0M0A0 M0M0A0
	If rounded or truncated values are used, the final answer must be exactly 1.5 eg1 $2.5 \div 1.66$ Answer 1.5 (may have kept full value on calculator) eg2 $2.5 \div 1.66 = 1.506$ Answer 1.5 (comes from further rounding)	M2A1 M2A0

Q	Answer	Mark	Comments
3	Alternative method 1		
	8×1.65 or 13.2	M1	oe
	their $13.2 \div 3.8$ or [3.47, 3.474] or $[3.47, 3.474] \times 100$ or [347, 347.4]	M1	oe their 13.2 must come from a division or multiplication using 8 and 1.65 only
	3.47	A1	SC2 3.4(0) or 3.5(0) SC1 50.16 or 1.27 or 1.28
	Alternative method 2		
	$8 \div 3.8$ or [2.1, 2.11]	M1	oe
	their $[2.1, 2.11] \times 1.65$ or [3.465, 3.4815] or $[3.465, 3.4815] \times 100$ or [346.5, 348.15]	M1	oe their [2.1, 2.11] must come from a division or multiplication using 8 and 3.8 only
	3.47	A1	SC2 3.4(0) or 3.5(0) SC1 50.16 or 1.27 or 1.28
	Alternative method 3		
	$1.65 \div 3.8$ or [0.43, 0.434211]	M1	oe
	$8 \times$ their [0.43, 0.434211] or [3.44, 3.474] or $[3.44, 3.474] \times 100$ or [344, 347.4]	M1dep	oe
	3.47	A1	SC2 3.4(0) or 3.5(0) SC1 50.16 or 1.27 or 1.28

3 cont	Additional Guidance	
	Up to M2 may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts	
	In Alt 1 and Alt 2 the 2nd mark is not dependent In Alt 3 the 2nd mark is dependent	
	Answer 347 cm or 348 cm with metres crossed out	M1M1A0
	Begins by multiplying or dividing by a power of 10 eg1 $800 \times 1.65 \div 3.8$ oe with answer 3.47 (recovered) eg2 $8 \times 165 \div 3.8$ oe with answer 347 eg3 800×1.65 oe with answer 1320 eg4 0.8×165 oe	M1M1A1 M1M1A0 M1M0 M1
	3.47 in working but a different answer on the answer line, eg 1 3.47 in working but 3 on answer line eg 2 3.47 in working but 347 on answer line	M1M1A0 M1M1A0
	$8 \times 1.65 \div 3.8$ oe	M1M1
	$8 \div (3.8 \div 1.65)$	M1M1
	$8 \times 1.65 \times 3.8$ oe (which gives 50.16)	M1M0
	$8 \div 1.65 \div 3.8$ oe (which gives 1.27 or 1.28)	M0M1
	$8 \div 1.65 \times 3.8$ oe (which gives 18.4242...)	M0M0
	1.65×3.8 with no other relevant working	M0