

Question		Answer	Marks	AO	Guidance
2	(a)	Substitute $x = 40$, $h = 17 + 15 \cos 240 = 9.5 \text{ m}$	B1	1.1b	cao
			[1]		
2	(b)	Maximum when $6x = 0$ or 360 so $x = 0, 60$ but the model is only valid for $0 \leq x \leq 40$ So Tom's argument is invalid.	M1 E1	2.1 2.3	Attempt to use the period of the $\cos 6x$ function. Must include a reference to either 60 or 240 or a sketch illustrating the x -direction stretch. Allow if wrong conclusion reached. Do not allow for an argument based on mechanics principles alone clear argument
			[2]		