Question Number	Scheme	Marks
1 (a)	$192 = \dfrac{\theta}{2} \times 12^2 \Rightarrow \theta = \dfrac{8}{3}$ (radians) accept 2.67 or better	M1A1 (2)
(b)	$l = 12 \times \dfrac{8}{3} = 32$ (cm)	M1A1 (2)
ALT	Use $A = \dfrac{1}{2} rl$ $192 = 6l \Rightarrow l = 32$ M1A1	
		[4]
(a) M1	Use of correct formula. If the formula for use with degrees is used, must change to radians for the answer to gain this mark	
A1	Correct answer	
(b) M1	Use of either correct (radian) formula with their angle from (a) or the degree formula	
A1	Correct answer awrt 32	