MARK SCHEME

Question number	Scheme	Marks
1 (a)	$l = r\theta \Rightarrow l = 13 \times 2 = 26$ (cm)	B1 [1]
(b)	$A = \frac{\theta}{2}r^2 = \frac{2}{2} \times 13^2 = 169$ (cm^2)	M1A1 [2]
		Total 3 marks

(a)	
B1	$l = 26$
(b)	
M1	Use of $A = \frac{\theta}{2}r^2$ or $A = \frac{1}{2}rl$ or $A = \frac{l^2}{2\theta}$
A1	$A = 169$

Question number	Scheme	Marks
2 (a)	Line l_1 $\quad m = \frac{-8}{4} = -2$ $\quad y - 8 = -2(x) \Rightarrow y + 2x = 8$ Line l_2 $\quad m = \frac{-4}{6} = -\frac{2}{3}$ $\quad y - 4 = -\frac{2}{3}(x) \Rightarrow 3y + 2x = 12$	M1A1 A1 [3]
(b)	$x \geq 0$ $\quad y + 2x \leq 8$ $\quad 3y + 2x \geq 12$ $\quad$ Accept < and >	B1B1ftB1ft [3]
		Total 6 marks

(a)	
M1	Calculating the gradient of either l_1 or l_2
A1	$y + 2x = 8$
A1	$3y + 2x = 12$
	NB If both are correct but not in the form $ax + by = c$ then award A1A0
(b)	For all 3 marks accept < and > instead of $\leq$ and $\geq$
B1	$x \geq 0$
B1ft	$y + 2x \leq 8$ oe (ft l_1)
B1ft	$3y + 2x \geq 12$ oe (ft l_2)