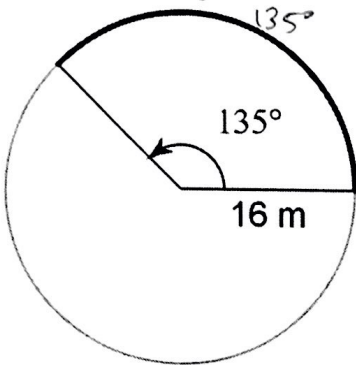


C-B5a:

1. Find the length of the arc.



Solution 5

Part / whole

$$\frac{135^\circ}{360^\circ} \rightarrow \frac{x}{2 \cdot \pi \cdot 16} \leftarrow \text{total circumference}$$

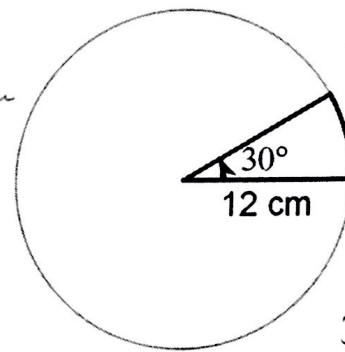
$$135 \cdot 32\pi = 360x$$

$$\frac{13,571.28}{360} = \frac{360x}{360}$$

$$\underline{37.698 \text{ m} = x}$$

Practice Assessment

2. Find the area of the sector.



$$\frac{30^\circ}{360^\circ} \rightarrow \frac{x}{\frac{\pi(12)^2}{2}}$$

total Area

$$\frac{1357.28}{360} = \frac{360x}{360}$$

$$\underline{37.698 \text{ cm}^2 = x}$$

← cute coincidence →

GPE-A1a:

3. Write the equation of a circle in standard form with center $(-3, 2)$ and radius $\sqrt{12}$.

$$(x-h)^2 + (y-k)^2 = r^2$$

$$(x+3)^2 + (y-2)^2 = (\sqrt{12})^2$$

$$(x+3)^2 + (y-2)^2 = 12$$

GPE-A1b

4. Find the center and radius of the circle: $x^2 - 6x + y^2 - 6y = -14$

$$x^2 - 6x + 9 + y^2 - 6y + 9 = -14 + 9 + 9$$

$$\frac{1}{2}(-6) \rightarrow (-3)^2 \quad \frac{1}{2}(-6) \rightarrow (-3)^2$$

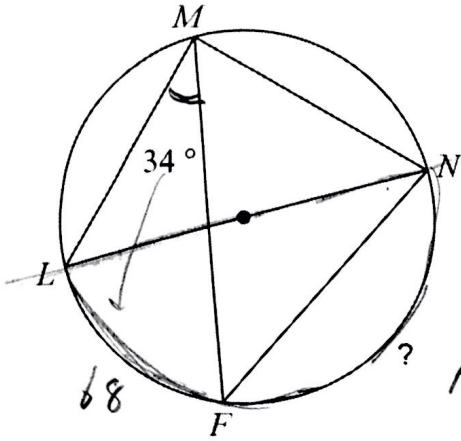
$$(x-3)(x-3) + (y-3)(y-3) = 4$$

$$(x-3)^2 + (y-3)^2 = 4$$

Center: $(3, 3)$
Radius: 2

C-A2a

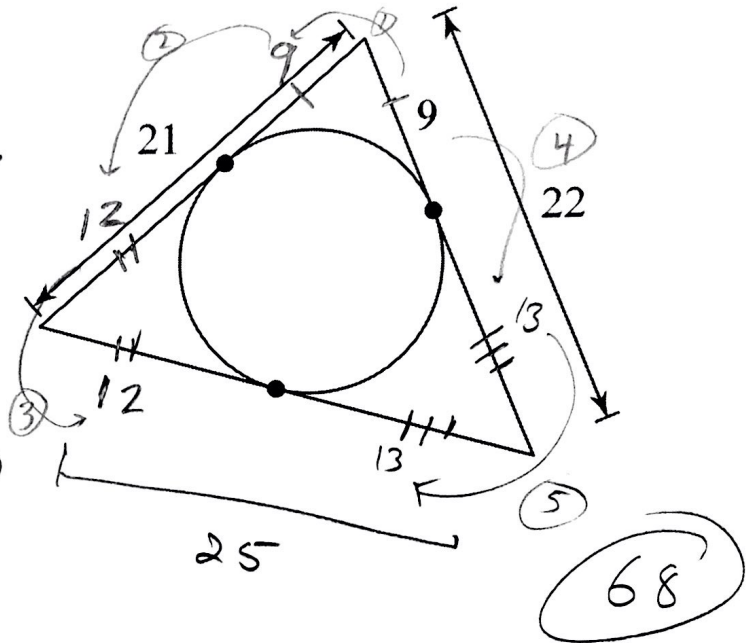
Find the measure of the arc.



$$\begin{aligned} \widehat{LN} &= 180^\circ \\ \widehat{LM} &= 68^\circ \\ \text{So} \\ \widehat{MN} &= 180 \\ &\quad - 68 \\ &= \mathbf{112^\circ} \end{aligned}$$

C-A1a

Find the perimeter of the triangle.



C-A1a