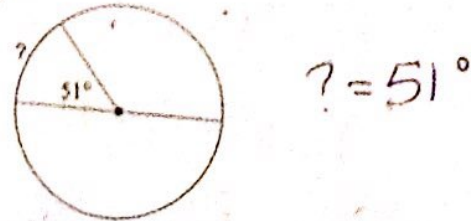
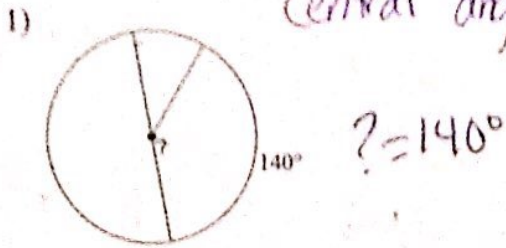


G6 C Level Test Review

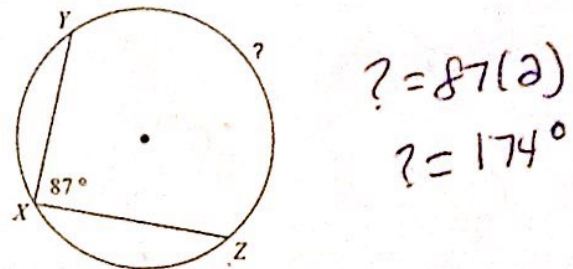
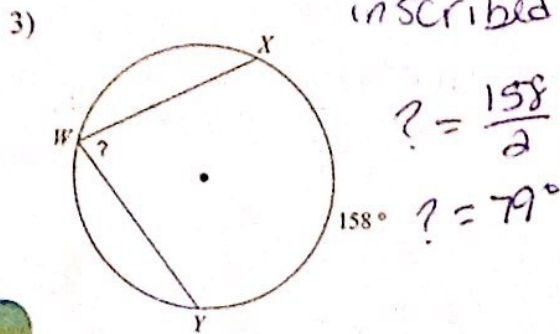
Find the measure of the arc or central angle indicated.

central angles are the same as the corresponding arc

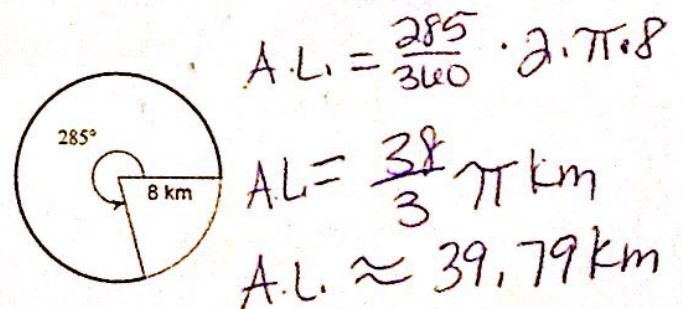
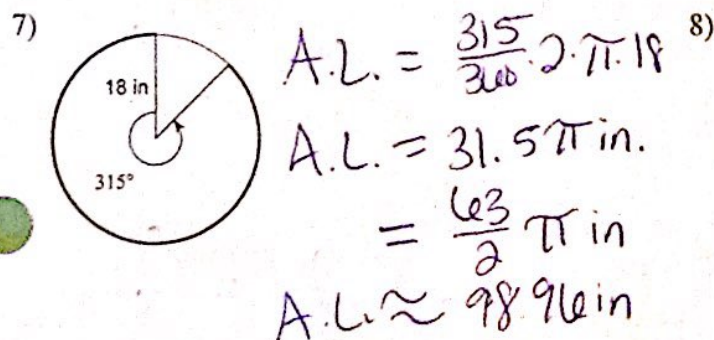
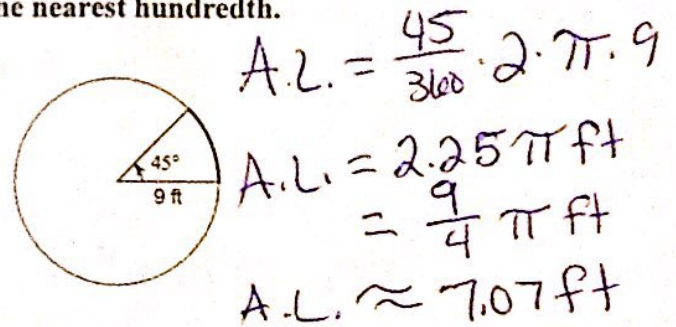
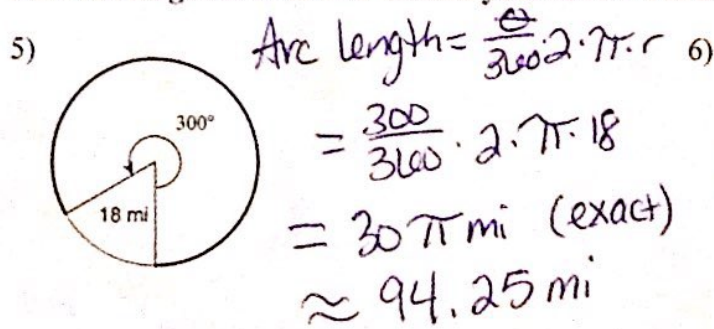


Find the measure of the arc or angle indicated.

inscribed angles are half of the corresponding arc

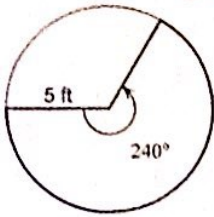


Find the length of each arc. Round your answers to the nearest hundredth.



Find the area of each sector. Round your answers to the nearest hundredth.

9)

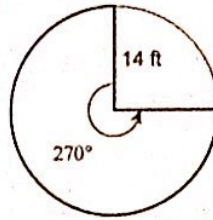


$$\text{Sector area} = \frac{\theta}{360} \cdot \pi \cdot r^2$$

$$S.A. = \frac{240}{360} \cdot \pi (5\text{ft})^2$$

$$S.A. = \frac{50}{3} \pi \text{ft}^2 \text{ (exact)}$$

$$S.A. \approx 52.36 \text{ft}^2$$

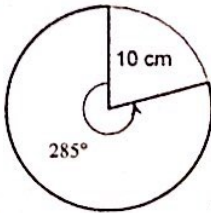


$$S.A. = \frac{270}{360} \cdot \pi (14\text{ft})^2$$

$$S.A. = 147\pi \text{ft}^2$$

$$S.A. \approx 461.81 \text{ft}^2$$

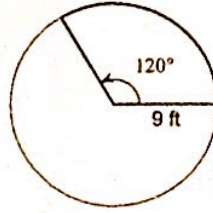
11)



$$S.A. = \frac{285}{360} \cdot \pi (10\text{cm})^2$$

$$S.A. = \frac{475}{6} \pi \text{cm}^2$$

$$S.A. \approx 248.71 \text{cm}^2$$



$$S.A. = \frac{120}{360} \cdot \pi (9\text{ft})^2$$

$$S.A. = 27\pi \text{ft}^2$$

$$S.A. \approx 84.82 \text{ft}^2$$

Identify the center and radius of each. Then sketch the graph.

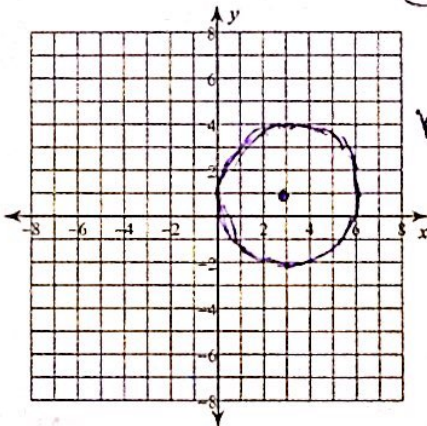
$$(x-h)^2 + (y-k)^2 = r^2$$

(h, k) = center
 r = radius

13) $(x-3)^2 + (y-1)^2 = 9$

center
 $(3, 1)$

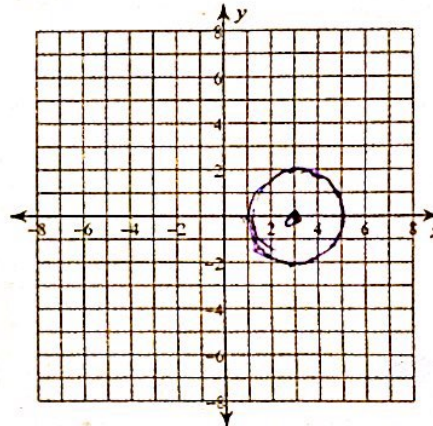
$$r = \sqrt{9} = 3$$



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

center: $(3, 0)$

$$r = \sqrt{4} = 2$$



Use the information provided to write the equation of each circle.

15) Center: $(-13, 12)$ Radius: 6

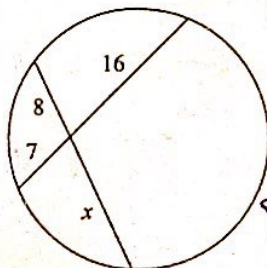
$$(x+13)^2 + (y-12)^2 = 36$$

16) Center: $(4, 5)$ Radius: 5

$$(x-4)^2 + (y-5)^2 = 25$$

Solve for x . Assume that lines which appear tangent are tangent.

17)

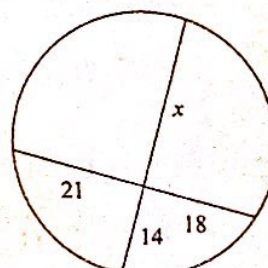


$$8 \cdot x = 7(16)$$

$$\frac{8x}{8} = \frac{112}{8}$$

$$x = 14$$

18)



$$x \cdot 14 = 21(18)$$

$$\frac{14x}{14} = \frac{378}{14}$$

$$x = 27$$