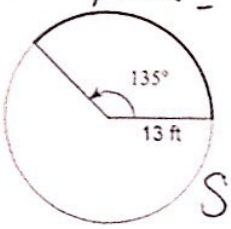
CCSS Geometry Name_____ ID: 1

G6 C Level Review

Date_____ Period____

Find the arc length AND sector area.

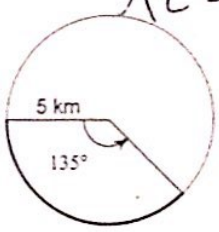
1) 

$A.L. = \frac{39\pi}{4}$ ft $= \frac{135}{360} \cdot 2 \cdot \pi \cdot (13\text{ ft})$

$\approx 30.63\text{ ft}$

$S.A. = \frac{135}{360} \cdot \pi \cdot (13\text{ ft})^2$

$= \frac{507}{8}\pi\text{ ft}^2 \approx 199.10\text{ ft}^2$



$AL = \frac{15\pi}{4}$ km $= \frac{135}{360} \cdot 2 \cdot \pi \cdot 5\text{km}$

$\approx 11.78\text{km}$

$S.A. = \frac{135}{360} \cdot \pi (5\text{km})^2$

$= \frac{75\pi}{8}\text{km}^2 \approx 29.45\text{km}^2$

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

3) Center: $(5, -2)$
Radius: 4

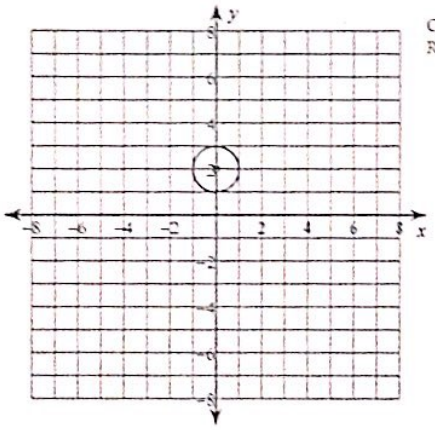
$(x-5)^2 + (y+2)^2 = 16$

4) Center: $(-16, 3)$
Radius: 1

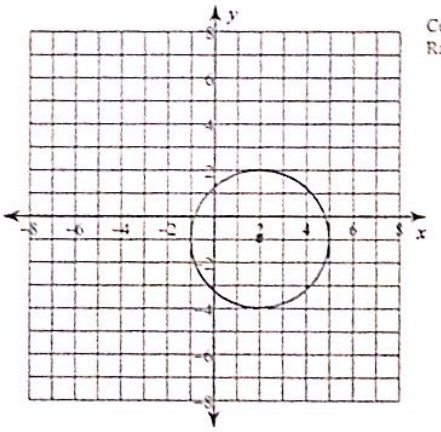
$(x+16)^2 + (y-3)^2 = 1$

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

5) $x^2 + (y-2)^2 = 1$

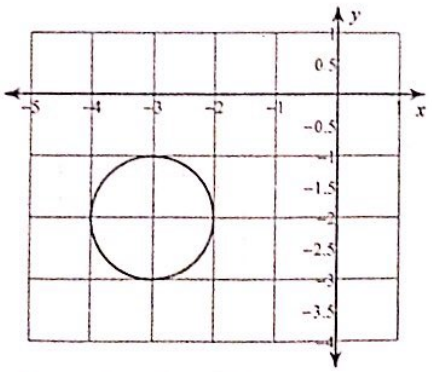


6) $(x-2)^2 + (y+1)^2 = 9$



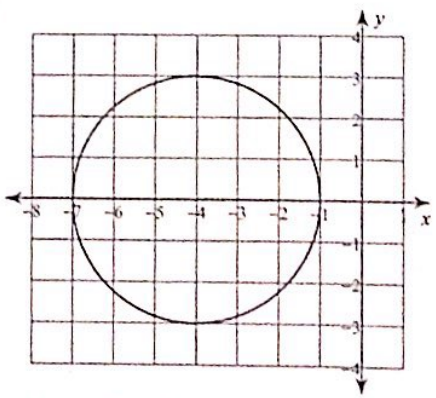
Identify the center and the radius of the following circles.

7)



$(x+3)^2 + (y+2)^2 = 1$

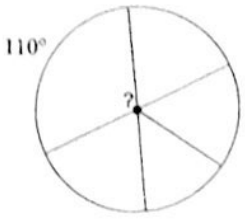
8)



$(x+4)^2 + y^2 = 9$

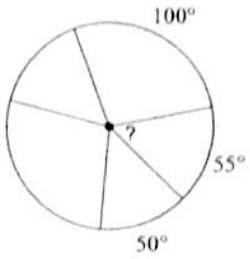
Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

9)



110°

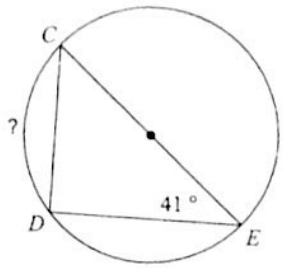
10)



55°

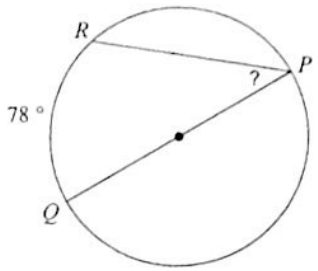
Find the measure of the arc or angle indicated.

11)



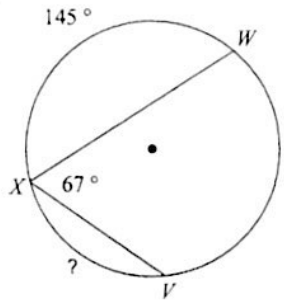
82°

12)



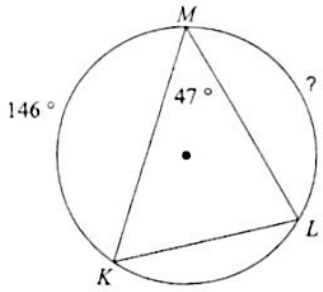
39°

13)



81°

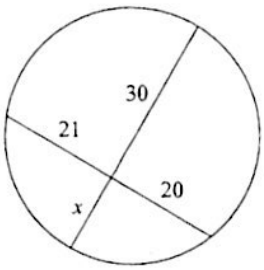
14)



120°

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

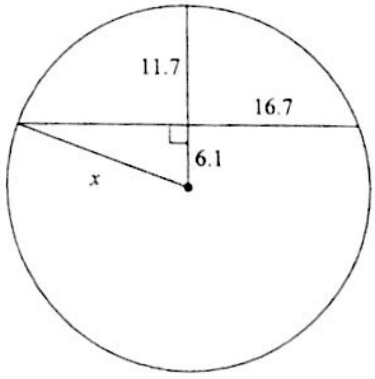
15)



14

Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

16)



17.8