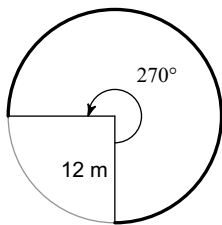


G6a: Check-in Quiz

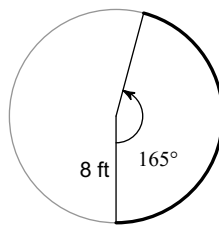
**C Level:**

**Find the arc length AND sector area of the shaded region.**

1)

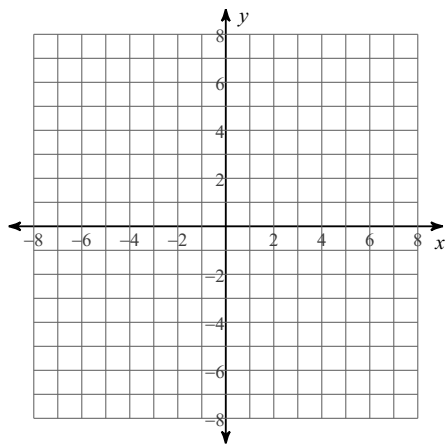


2)

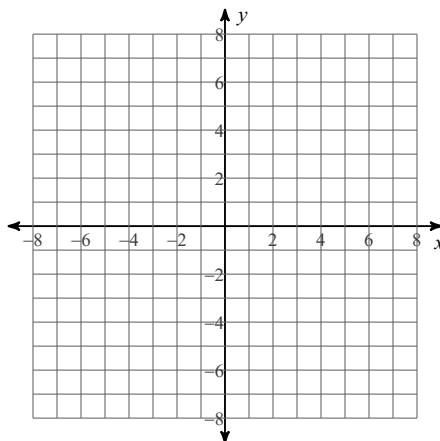


**Identify the center and radius of each. Then sketch the graph.**

3)  $(x + 3)^2 + (y - 1)^2 = 8$



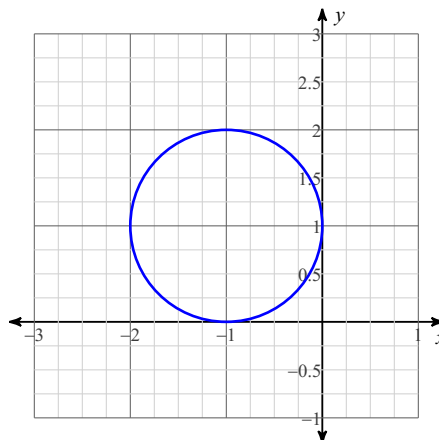
4)  $x^2 + (y - \sqrt{15})^2 = 9$



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

5) Center:  $(-6, -12)$   
 Radius: 3

6)



**B Level:**

**Find the diameter of the circle with the given area. Use correct units and round to 2 decimals.**

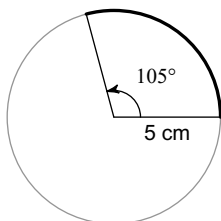
7)  $\text{area} = 78.5 \text{ mi}^2$

**Find the area of the circle with the given info. Use correct units and round to 2 decimals.**

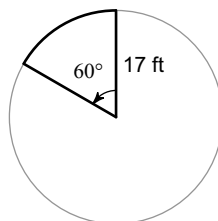
8)  $\text{circumference} = 71.6 \text{ ft}$

**Find the arc length and area for each shaded sector. Use appropriate units and show your answer in exact and rounded forms.**

9)



10)



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

11) Ends of a diameter:  $(9, -12)$  and  $(-1, -12)$

12) Center:  $(-15, 15)$   
Point on Circle:  $(-11, 15)$

**Challenge problem:**

13) Write the following equation in standard (center-radius) form:

$$x^2 + 14x + y^2 - 4y = -17$$