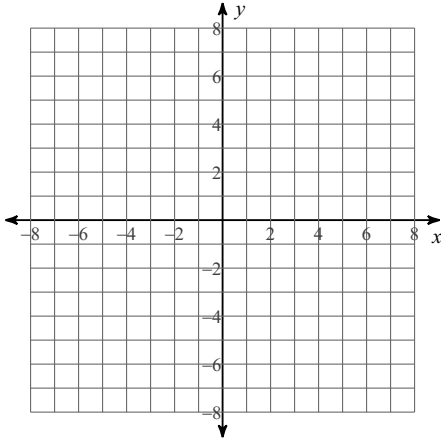


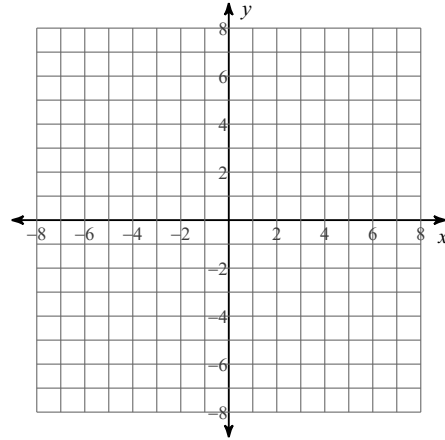
Equations of Circles

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

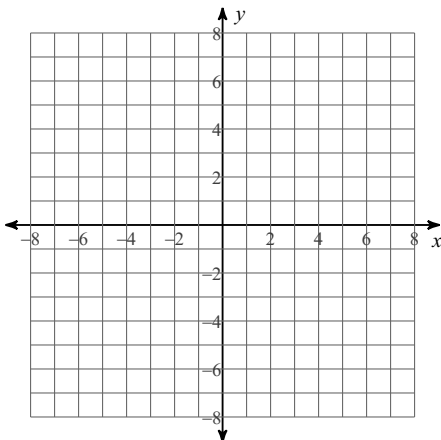
1) $(x + 3)^2 + (y + 4)^2 = 4$



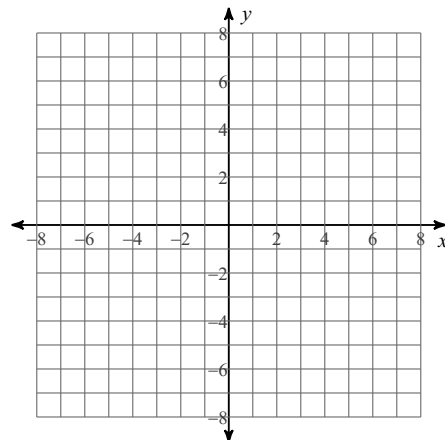
2) $(x + 1)^2 + (y - 2)^2 = 4$



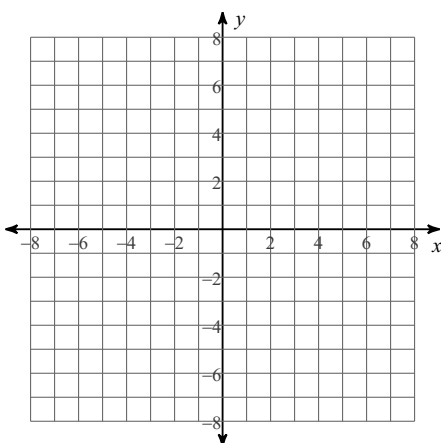
3) $(x + 3)^2 + (y + 1)^2 = 4$



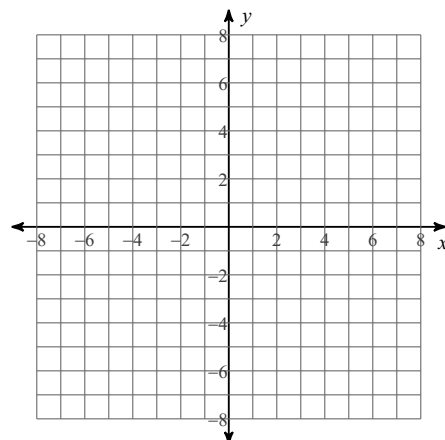
4) $(x + 4)^2 + (y - 1)^2 = 9$



5) $\left(x + \frac{7}{2}\right)^2 + \left(y - \frac{1}{2}\right)^2 = 1$



6) $(x - 4)^2 + (y + 1)^2 = 4$



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

7) Center: $(8, 2)$
Radius: 8

8) Center: $(6, 8)$
Radius: 7

9) Center: $(4, 11)$
Point on Circle: $(2, 12)$

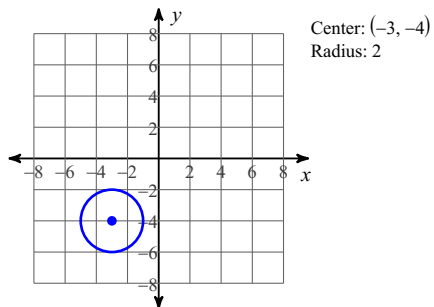
10) Center: $(16, 3)$
Point on Circle: $(13, 3)$

11) Ends of a diameter: $(-6, 6)$ and $(16, 2)$

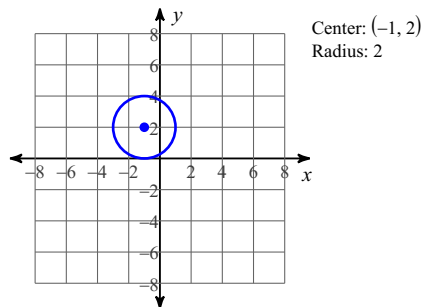
12) Ends of a diameter: $(-6, -14)$ and $(4, 2)$

Answers to Equations of Circles (ID: 1)

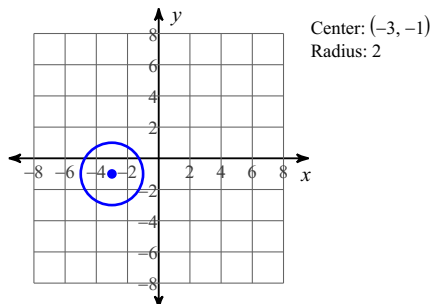
1)



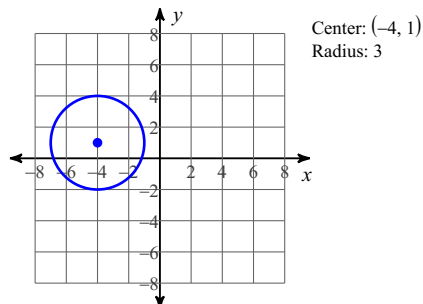
2)



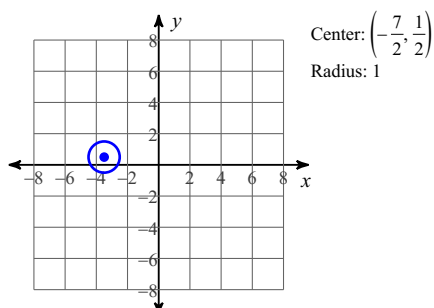
3)



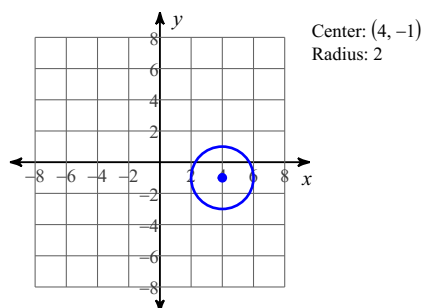
4)



5)



6)



7) $(x - 8)^2 + (y - 2)^2 = 64$

8) $(x - 6)^2 + (y - 8)^2 = 49$

9) $(x - 4)^2 + (y - 11)^2 = 5$

10) $(x - 16)^2 + (y - 3)^2 = 9$

11) $(x - 5)^2 + (y - 4)^2 = 125$

12) $(x + 1)^2 + (y + 6)^2 = 89$