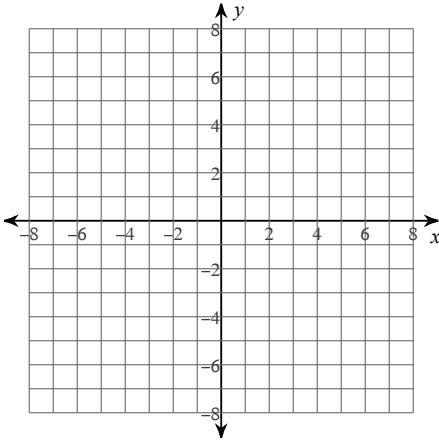


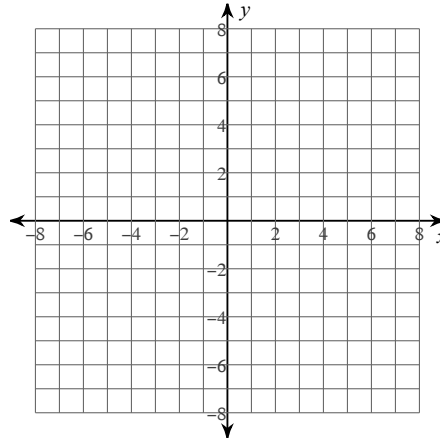
Assignment

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

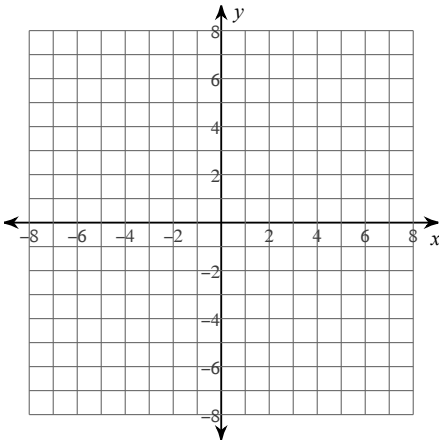
1)  $(x - 1)^2 + (y + 1)^2 = 9$



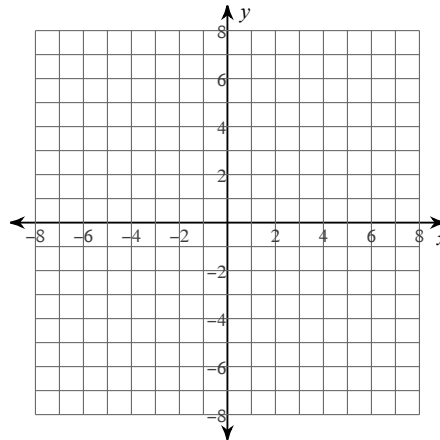
2)  $(x + 1)^2 + (y - 1)^2 = 1$



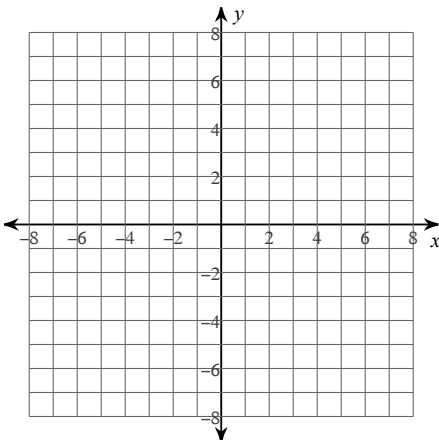
3)  $(x - 3)^2 + (y - 1)^2 = 9$



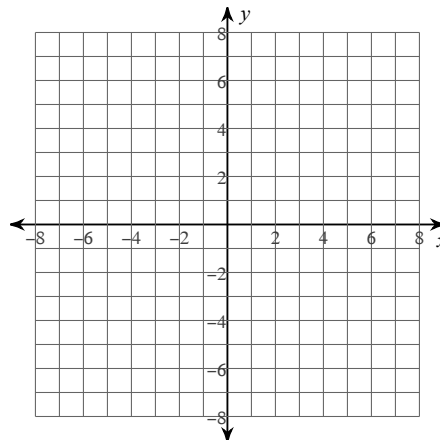
4)  $(x + 4)^2 + (y + 2)^2 = 9$



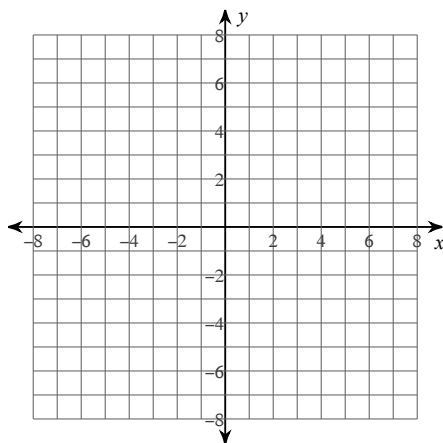
5)  $(x + 3)^2 + (y + 4)^2 = 8$



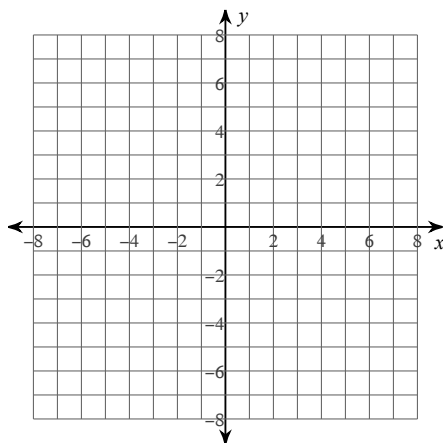
6)  $x^2 + (y + 1)^2 = 1$



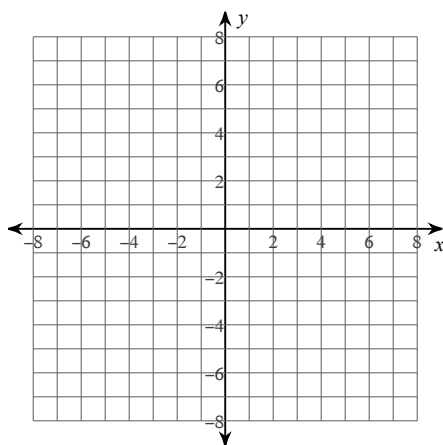
7)  $(x - 1)^2 + y^2 = 16$



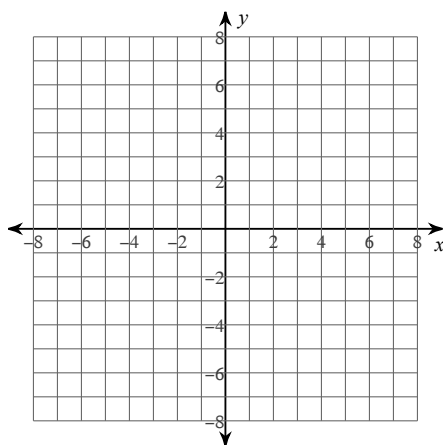
8)  $(x - 1)^2 + (y - 4)^2 = 4$



9)  $(x + 2)^2 + (y + 1)^2 = 19$



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



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

11) Center:  $(-7, 0)$   
 Radius: 8

12) Center:  $(10, 5)$   
 Radius: 3

13) Center:  $\left(-\frac{31}{2}, \frac{5}{2}\right)$   
 Radius: 2

14) Center:  $(9, 6)$   
 Radius:  $\sqrt{26}$

15) Center:  $(5, 8)$   
Radius:  $2\sqrt{15}$

16) Center:  $(-7, -6)$   
Radius: 9

17) Center:  $(-10, 5)$   
Radius: 5

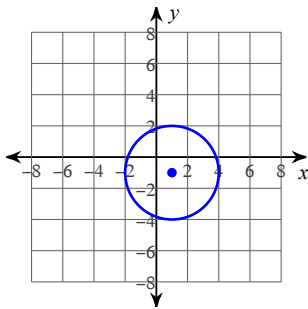
18) Center:  $(5, -15)$   
Radius: 1

19) Center:  $(-5, -11)$   
Radius:  $3\sqrt{3}$

20) Center:  $(10, 9)$   
Radius: 2

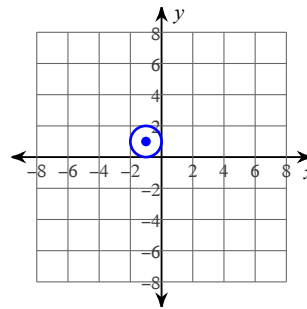
# Answers to Assignment (ID: 1)

1)



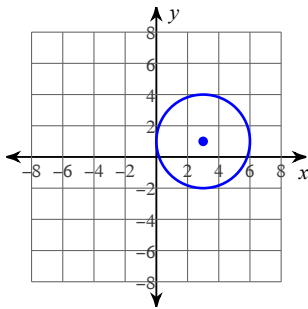
Center: (1, -1)  
Radius: 3

2)



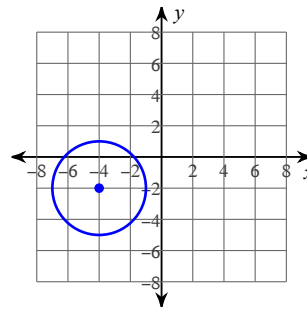
Center: (-1, 1)  
Radius: 1

3)



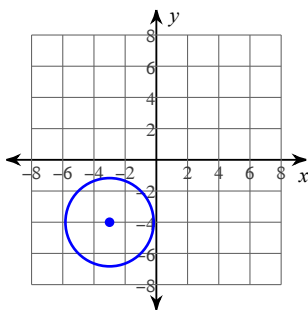
Center: (3, 1)  
Radius: 3

4)



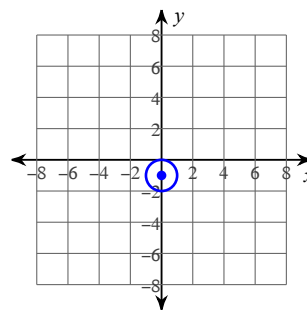
Center: (-4, -2)  
Radius: 3

5)



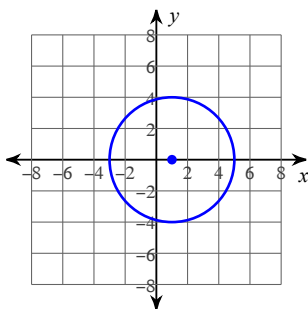
Center: (-3, -4)  
Radius:  $2\sqrt{2}$

6)



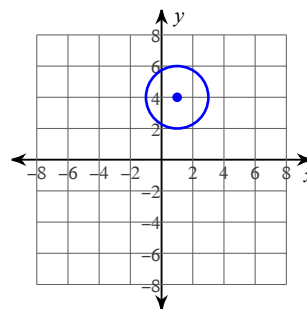
Center: (0, -1)  
Radius: 1

7)



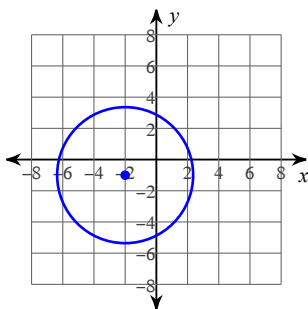
Center: (1, 0)  
Radius: 4

8)



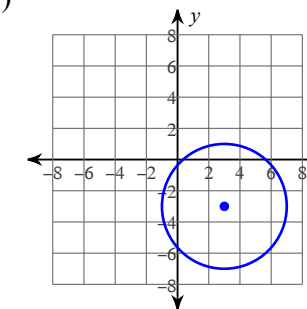
Center: (1, 4)  
Radius: 2

9)



Center: (-2, -1)  
Radius:  $\sqrt{19}$

10)



Center: (3, -3)  
Radius: 4

11)  $(x + 7)^2 + y^2 = 64$

12)  $(x - 10)^2 + (y - 5)^2 = 9$

13)  $\left(x + \frac{31}{2}\right)^2 + \left(y - \frac{5}{2}\right)^2 = 4$

14)  $(x - 9)^2 + (y - 6)^2 = 26$

15)  $(x - 5)^2 + (y - 8)^2 = 60$

16)  $(x + 7)^2 + (y + 6)^2 = 81$

17)  $(x + 10)^2 + (y - 5)^2 = 25$

18)  $(x - 5)^2 + (y + 15)^2 = 1$

19)  $(x + 5)^2 + (y + 11)^2 = 27$

20)  $(x - 10)^2 + (y - 9)^2 = 4$