

EQUATIONS OF CIRCLES AND GRAPHING

Date _____ Period _____

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

1) $x^2 + y^2 + 20x - 28y + 292 = 0$

2) $x^2 + y^2 - 30x + 216 = 0$

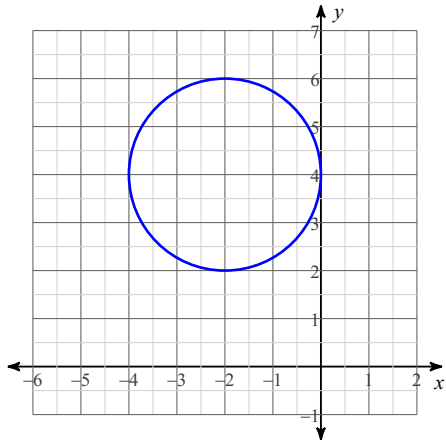
3) Center: $(16, -16)$
Radius: 2

4) Center: $\left(-\frac{5}{2}, \frac{7}{2}\right)$
Radius: 8

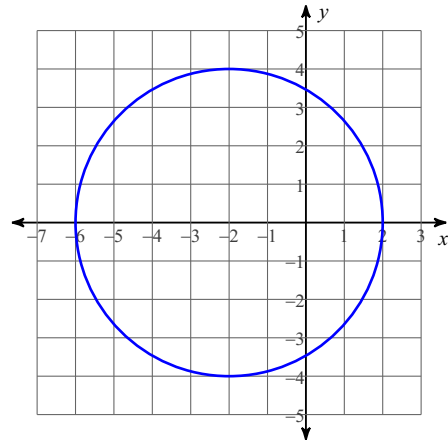
5) Center: $(6, 15)$
Radius: 1

6) Center: $(3, 0)$
Radius: 12

7)

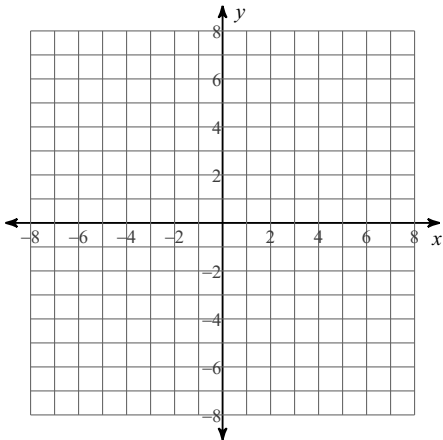


8)

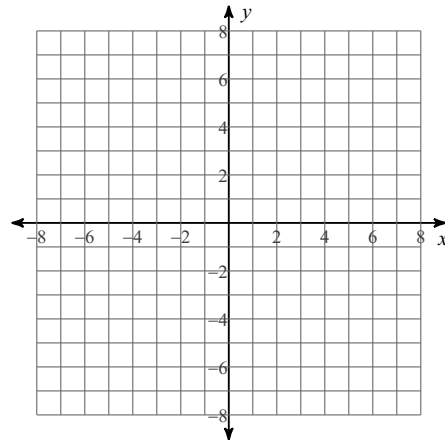


Identify the center and radius of each. Then sketch the graph.

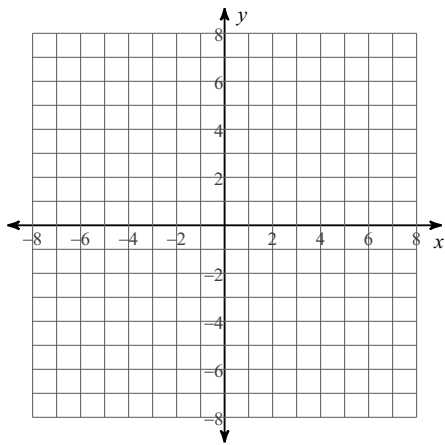
9) $x^2 + (y + 1)^2 = 4$



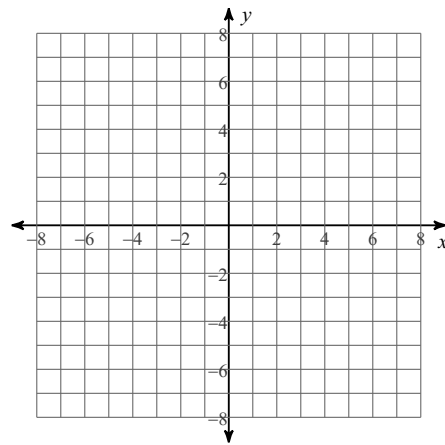
10) $(x + 1)^2 + (y - 4)^2 = 9$



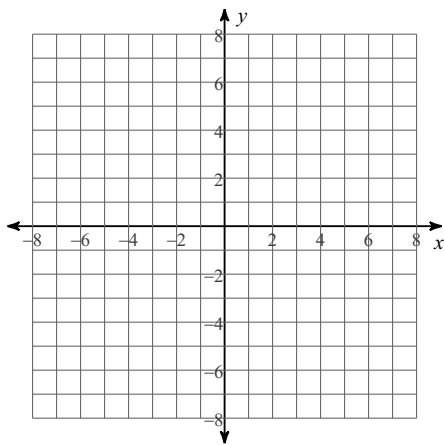
$$11) (x - 2)^2 + (y - 1)^2 = 16$$



$$12) (x - 2)^2 + (y + 3)^2 = 1$$



$$13) x^2 + (y + 2)^2 = 16$$



$$14) (x - 4)^2 + y^2 = 1$$

