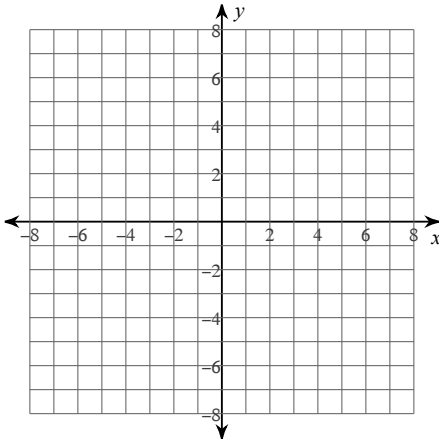


7.1 Circles

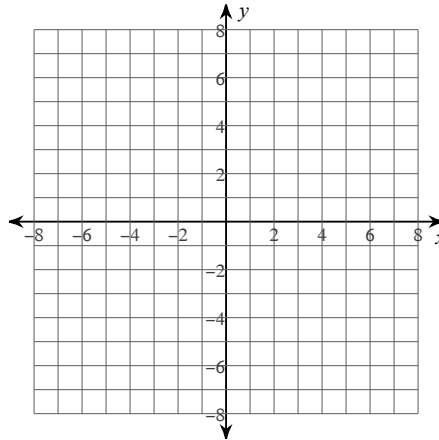
1) Summarize where the equation of a circle comes from.

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

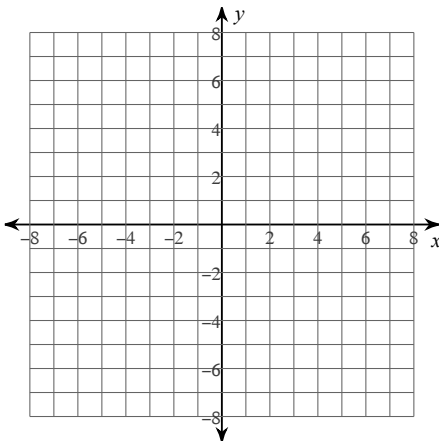
2) $(x - 4)^2 + (y - 2)^2 = 1$



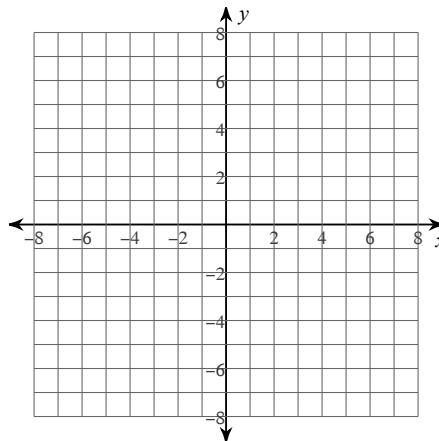
3) $(x - 1)^2 + (y - 4)^2 = 4$



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

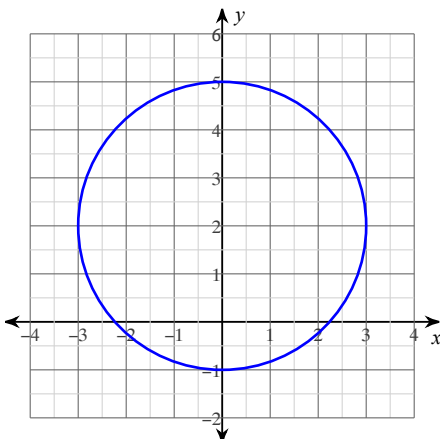


5) $(x + 3)^2 + (y + 3)^2 = 15$

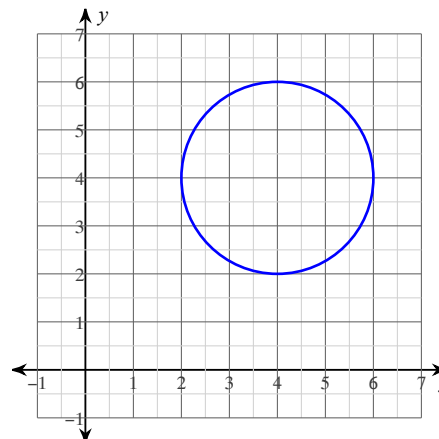


Use the information provided to write the equation of each circle.

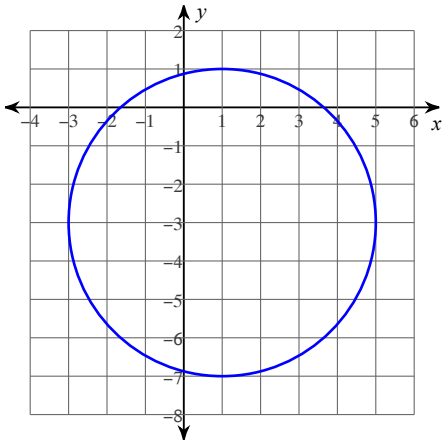
6)



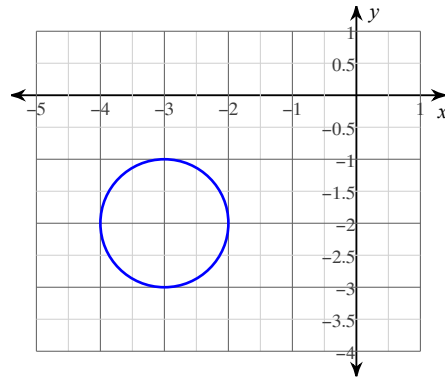
7)



8)



9)



10) Center: $(-3, 9)$
Radius: 6

11) Center: $(-3, -8)$
Radius: 3

12) Center: $(-12, -16)$
Radius: 1

13) Center: $(4, -11)$
Point on Circle: $(12, -11)$

14) Center: $(-2, 1)$
Point on Circle: $(-17, -2)$

15) Center: $(-5, 13)$
Point on Circle: $(-2, 10)$