

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

## Graphing and Properties of Circles

**Identify the center and radius of each.**

1.  $x^2 + y^2 = 49$

5.  $(x + 10)^2 + (y + 9)^2 = 36$

2.  $x^2 + y^2 = 324$

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

3.  $(x + 2)^2 + (y - 3)^2 = 183$

7.  $x^2 + (y + 2)^2 = 121$

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

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

**Write the equation for the circle given the center and the radius.**

9. Center (0,0) Radius=3

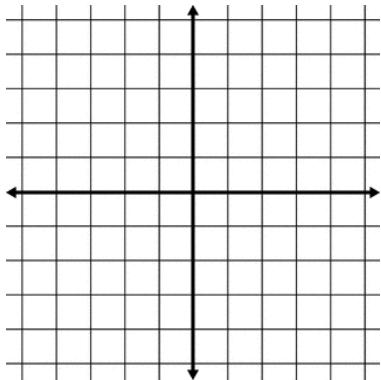
11. Center (-2,2) Radius=6

10. Center (0,5) Radius=7

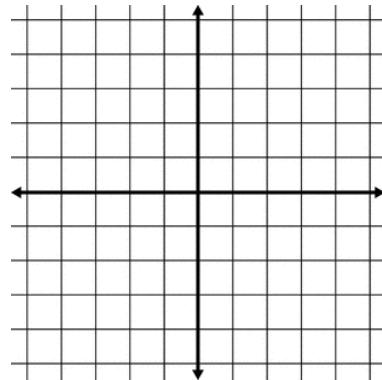
12. Center (7,-12) Radius=8

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

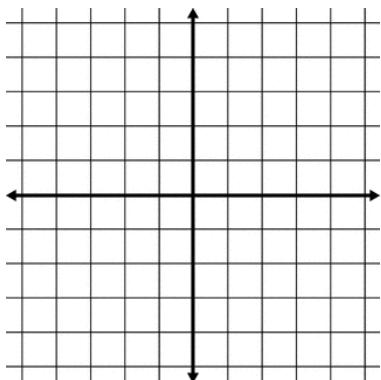
13.  $(x + 1)^2 + (y - 2)^2 = 9$



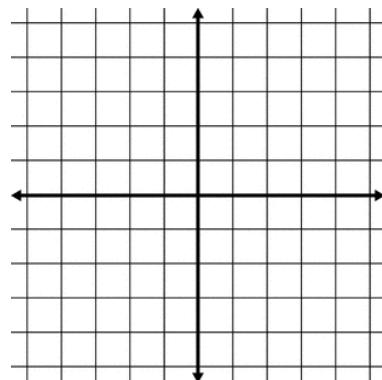
16.  $(x + 3)^2 + (y - 3)^2 = 16$



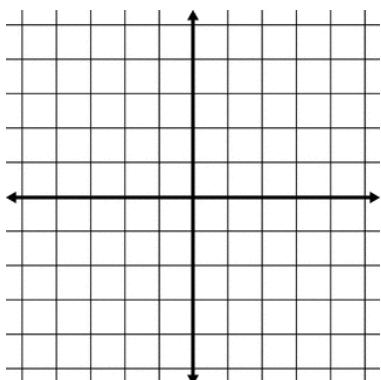
14.  $(x + 2)^2 + (y + 3)^2 = 4$



17.  $(x + 3)^2 + (y + 2)^2 = 9$



15.  $(x + 1)^2 + (y + 2)^2 = 25$



18.  $x^2 + (y - 3)^2 = 25$

