

# 11-1 Circles $(x - h)^2 + (y - k)^2 = r^2$

Name: \_\_\_\_\_

Time Start: \_\_\_\_\_ Finish: \_\_\_\_\_

Total Time = \_\_\_\_\_

**Give the center of each circle and the radius defined by each given equation.**

1.  $(x - 4)^2 + (y - 2)^2 = 25$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

2.  $(x + 3)^2 + (y - 1)^2 = 16$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

3.  $(x - 1)^2 + (y + 7)^2 = 81$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

4.  $x^2 + (y - 2)^2 = 4$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

5.  $(x - 9)^2 + y^2 = 1$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

6.  $(x - 2)^2 + (y + 2)^2 = 9$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

7.  $(x - 1)^2 + (y - 1)^2 = 25$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

8.  $x^2 + y^2 = 49$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

9.  $x^2 + (y + 8)^2 = 121$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

10.  $(x + 1)^2 + (y - 1)^2 = 100$  Center = \_\_\_\_\_ Radius = \_\_\_\_\_

**Give the equation of the circle that has the given center and given radius.**

11. Center = (2, 5) Radius = 3 Equation = \_\_\_\_\_

12. Center = (-1, 2) Radius = 2 Equation = \_\_\_\_\_

13. Center = (0, -3) Radius = 7 Equation = \_\_\_\_\_

14. Center = (2, -7) Radius = 12 Equation = \_\_\_\_\_

15. Center = (5, 5) Radius = 6 Equation = \_\_\_\_\_

16. Center = (0, 5) Radius = 9 Equation = \_\_\_\_\_

17. Center = (1, -4) Radius = 2 Equation = \_\_\_\_\_

18. Center = (0, 0) Radius = 1 Equation = \_\_\_\_\_

19. Center = (2, 0) Radius = 8 Equation = \_\_\_\_\_

20. Center = (1, -1) Radius = 1 Equation = \_\_\_\_\_