

**Geometry – Unit 10 Practice**  
**Equations of Circles #1**

G.GPE.A.1

**Name:** \_\_\_\_\_!

**Date:** \_\_\_\_\_ **Pd:** \_\_\_\_\_

1. Write the equation of a circle whose diameter is 14 and whose center is at (-6, -3).
2. Find the coordinates of the center of this circle:  $(x + 3)^2 + (y - 3)^2 = 9$ .
3. Write the equation of a circle that has a center at (4, -2) and diameter of 10.
4. The point (1, 2) is on the circle whose equation is  $(x - 2)^2 + (y)^2 = 25$ . (True / False)
5. What are the coordinates of the center and radius of this circle?  $(x - 2)^2 + (y - 4)^2 = 36$ .
6. What are the coordinates of the center of this circle?  $(x)^2 + (y - 3)^2 = 75$ .
7. Write the equation of a circle that has a center at (7, -4) and radius of 3.
8. Write the equation of a circle whose diameter is 9 and whose center is at (-2, 4).
9. The point (-3, 0) is located on / in / outside the circle whose equation is  $(x - 3)^2 + (y)^2 = 16$ .
10. Write the equation of a circle that has a center at (4, -2) and radius of 9.
11. A certain circle has its center at (2, 2) containing the point (4, 6). Find the radius.
12. Write the equation of a circle that has a center at (-2, 3) and contains the point (2, -2).
13. A circle has the equation  $(x - 2)^2 + (y - 4)^2 = 81$ , find its diameter.