

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

Date \_\_\_\_\_

Topic : Graphs of Circles - Worksheet 1

Do the following:

1. Write the equation of a circle whose diameter is 12 and whose center is at (-6, -3)?
2. What are the coordinates of the center of this circle?  
 $(x + 4)^2 + (y - 3)^2 = 9.$
3. Write the equation of a circle that has a center at (4, -2) and diameter of 4?
4. The point (0, 2) is on the circle whose equation is  $(x - 2)^2 + (y)^2 = 25.$  (True or False)
5. What are the coordinates of the center of this circle?  
 $(x + 3)^2 + (y - 3)^2 = 36.$
6. What are the coordinates of the center of this circle?  
 $(x)^2 + (y - 2)^2 = 72.$
7. Write the equation of a circle that has a center at (8, -4) and radius of 4?
8. Write the equation of a circle whose diameter is 9 and whose center is at (-2, 2)?
9. The point (-3, 0) is on the circle whose equation is  $(x - 3)^2 + (y)^2 = 16.$  (True or False)
10. Write the equation of a circle that has a center at (4, -2) and radius of 7?



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Topic : Graphs of Circles - Worksheet 2

Do the following:

1. Write the equation of a circle whose diameter is 6 and whose center is at  $(-7, -4)$ ?
2. What are the coordinates of the center of this circle?  
 $(x - 5)^2 + (y + 4)^2 = 25$ .
3. Write the equation of a circle that has a center at  $(5, -3)$  and diameter of 10?
4. The point  $(0, 8)$  is on the circle whose equation is  $(x)^2 + (y - 2)^2 = 36$ . (True or False)
5. What are the coordinates of the center of this circle?  
 $(x - 4)^2 + (y + 6)^2 = 64$ .
6. What are the coordinates of the center of this circle?  
 $(x)^2 + (y + 3)^2 = 121$ .
7. Write the equation of a circle that has a center at  $(9, -5)$  and radius of 5?
8. Write the equation of a circle whose diameter is 6 and whose center is at  $(-4, 4)$ ?
9. The point  $(-6, 2)$  is inside the circle whose equation is  $(x + 4)^2 + (y)^2 = 81$ . (True or False)
10. Write the equation of a circle that has a center at  $(6, -4)$  and radius of 8?



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Topic : Graphs of Circles - Worksheet 3

Do the following:

1. Write the equation of a circle whose diameter is 8 and whose center is at (-8, -5)?
2. What are the coordinates of the center of this circle?  
 $(x - 6)^2 + (y + 5)^2 = 169$ .
3. Write the equation of a circle that has a center at (6, -4) and diameter of 10?
4. The point (-6, 1) is on the circle whose equation is  $(x + 2)^2 + (y - 1)^2 = 16$ . (True or False)
5. What are the coordinates of the center of this circle?  
 $(x - 8)^2 + (y + 5)^2 = 4$ .
6. What are the coordinates of the center of this circle?  
 $(x)^2 + (y + 4)^2 = 25$ .
7. Write the equation of a circle that has a center at (2, -6) and radius of 6?
8. Write the equation of a circle whose diameter is 24 and whose center is at (-6, 6)?
9. The point (-8, 6) is on the circle whose equation is  $(x - 6)^2 + (y)^2 = 121$ . (True or False)
10. Write the equation of a circle that has a center at (8, -6) and radius of 10?



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Topic : Graphs of Circles - Worksheet 4

Do the following:

1. Write the equation of a circle whose diameter is 16 and whose center is at  $(-9, -6)$ ?
2. What are the coordinates of the center of this circle?  
 $(x - 8)^2 + (y + 7)^2 = 36$ .
3. Write the equation of a circle that has a center at  $(8, -6)$  and diameter of 4?
4. The point  $(-2, 0)$  is on the circle whose equation is  $(x + 1)^2 + (y + 1)^2 = 25$ . (True or False)
5. What are the coordinates of the center of this circle?  
 $(x - 6)^2 + (y + 6)^2 = 196$ .
6. What are the coordinates of the center of this circle?  
 $(x)^2 + (y + 5)^2 = 225$ .
7. Write the equation of a circle that has a center at  $(3, -7)$  and radius of 8?
8. Write the equation of a circle whose diameter is 14 and whose center is at  $(-8, 8)$ ?
9. The point  $(-9, 8)$  is inside the circle whose equation is  $(x + 8)^2 + (y)^2 = 100$ . (True or False)
10. Write the equation of a circle that has a center at  $(9, -7)$  and radius of 12?



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Topic : Graphs of Circles - Worksheet 5

Do the following:

1. Write the equation of a circle whose diameter is 18 and whose center is at (-5, -8)?
2. What are the coordinates of the center of this circle?  
 $(x - 9)^2 + (y + 8)^2 = 16$ .
3. Write the equation of a circle that has a center at (6, -3) and diameter of 20?
4. The point (0, -7) is on the circle whose equation is  $(x + 2)^2 + (y + 3)^2 = 9$ . (True or False)
5. What are the coordinates of the center of this circle?  
 $(x - 8)^2 + (y + 9)^2 = 81$ .
6. What are the coordinates of the center of this circle?  
 $(x)^2 + (y + 6)^2 = 49$ .
7. Write the equation of a circle that has a center at (4, -8) and radius of 9?
8. Write the equation of a circle whose diameter is 30 and whose center is at (-5, 4)?
9. The point (-4, 6) is on the circle whose equation is  $(x + 6)^2 + (y)^2 = 81$ . (True or False)
10. Write the equation of a circle that has a center at (2, -8) and radius of 4?

