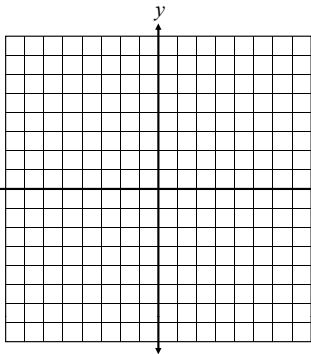
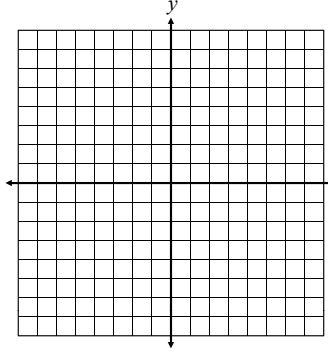
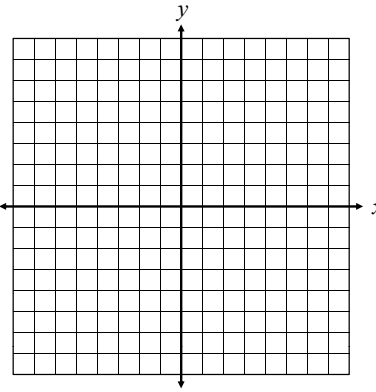
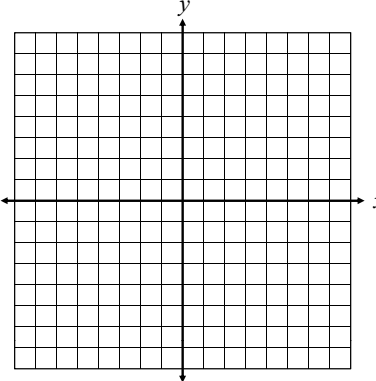


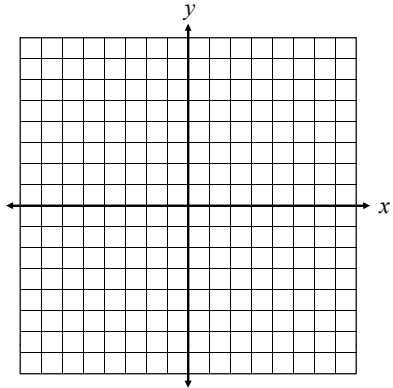
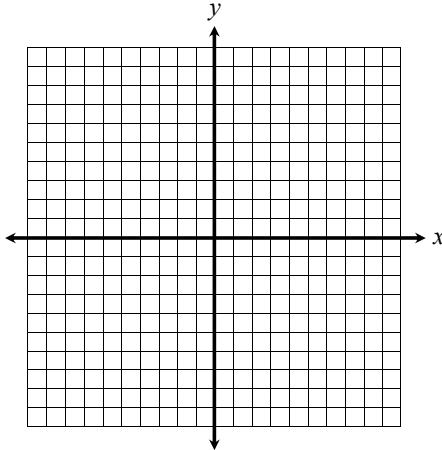
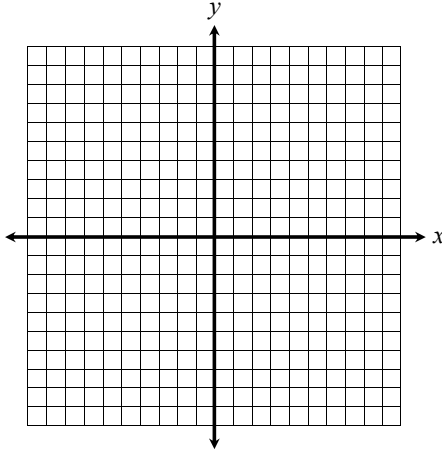
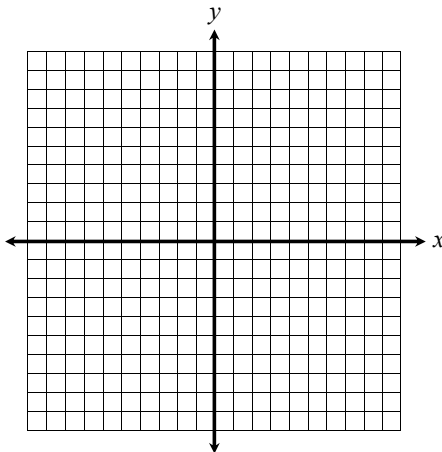
Name:

Date:

Topic:

Class:

Main Ideas/Questions	Notes/Examples
<h3 style="text-align: center;">Graphing Circles</h3>	<p style="text-align: center;">Standard Form of the Equation of a Circle:</p> <div style="text-align: center; border: 1px solid black; width: 200px; height: 40px; margin: 0 auto;"></div> <p style="text-align: center;">where _____ is the center and _____ is the radius</p>
	<p>Directions: Identify the center and radius of each circle, then graph.</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="440 630 966 1098" style="width: 48%;"> <p>1. $(x + 2)^2 + (y - 5)^2 = 9$</p> <p>Center: </p> <p>Radius: _____</p> </div> <div data-bbox="966 630 1490 1098" style="width: 48%;"> <p>2. $(x - 7)^2 + y^2 = 1$</p> <p>Center: </p> <p>Radius: _____</p> </div> </div>
<h3 style="text-align: center;">Equations NOT in Standard Form</h3>	<p>Directions: Write the equation in standard form, identify the center and radius, then graph.</p> <p>3. $5x^2 + 5y^2 = 80$</p> <div style="text-align: center; margin: 10px 0;"></div> <p>Center: _____ Radius: _____</p>
	<p>4. $(y + 3)^2 = 25 - x^2$</p> <div style="text-align: center; margin: 10px 0;"></div> <p>Center: _____ Radius: _____</p>

	<p>5. $2(x-1)^2 - 8 = -2(y+6)^2$</p> <p>Center: Radius:</p> 
<p>Examples with Completing the Square</p>	<p>6. $x^2 + y^2 + 6x = -5$</p> <p>Center: Radius:</p> 
	<p>7. $x^2 + y^2 + 2y = 6y + 32$</p> <p>Center: Radius:</p> 
	<p>8. $x^2 + y^2 + 14x = 2y - 41$</p> <p>Center: Radius:</p> 



Name: _____

Unit 9: Conic Sections

Date: _____ Bell: _____

Homework 1: Circles

**** This is a 2-page document! ****

Directions: Write the equation of each circle with the given information.

1. Center: (-9, 0), Radius: 1

2. Center: (3, -3), Radius: $2\sqrt{6}$

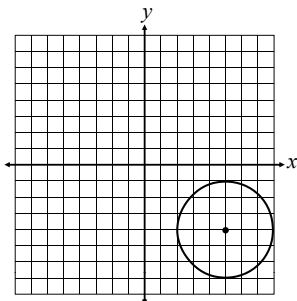
3. Center: (4, 7), Endpoint: (-1, -2)

4. Center: (0, -8), Endpoint: (2, -5)

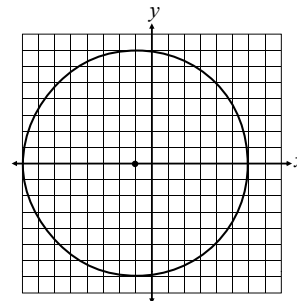
5. Endpoints of Diameter: (-6, 2) and (-8, 10)

6. Endpoints of Diameter: (-13, -7) and (11, 11)

7.



8.



Directions: Identify the center and radius of each circle given the equations below.

9. $(x + 1)^2 + (y + 4)^2 = 81$

10. $x^2 + (y - 5)^2 = 7$

Center:

Radius:

Center:

Radius:

11. $(x - 7)^2 + (y + 2)^2 = 40$

Center:

Radius:

12. $2(x + 6)^2 + 2y^2 = 144$

Center:

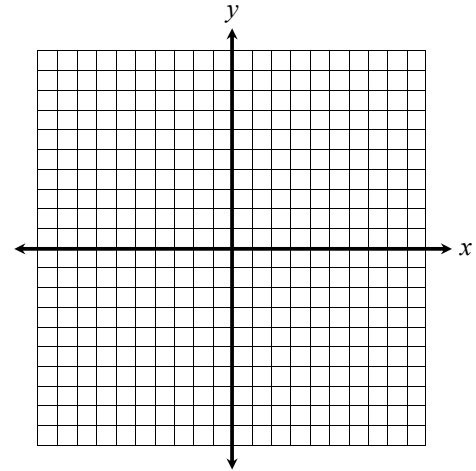
Radius:

Directions: Write the equation in standard form, identify the center and radius, then graph the circle.

13. $3x^2 + 3y^2 - 5 = 142$

Center:

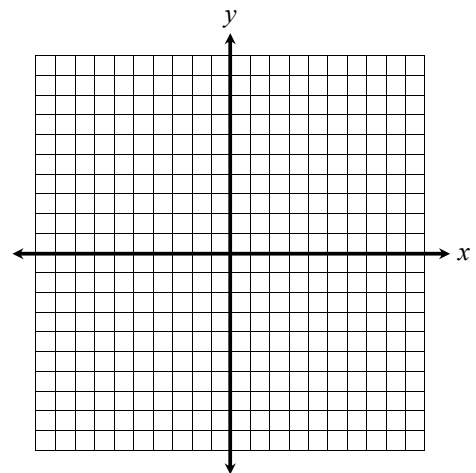
Radius:



14. $x^2 + y^2 + 13y = y - 32$

Center:

Radius:



15. $x^2 + y^2 + 7y = 10x + 3y - 13$

Center:

Radius:

