Geometry Name_____ ID: 1

10.3 Practice Quiz

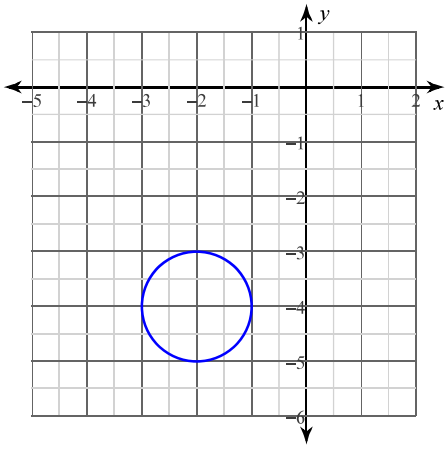
Date_____ Period____

Use the information provided to write the equation of each circle.

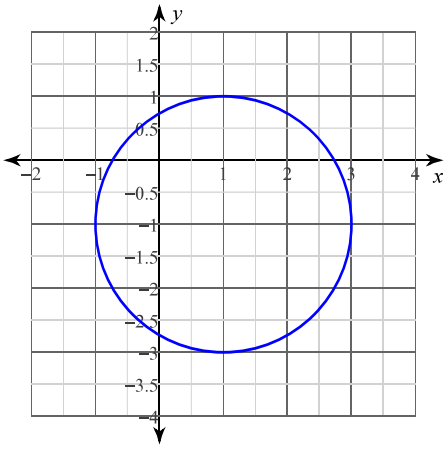
1) Center: $(-11, 3)$
Radius: 5

2) Center: $(9, -14)$
Radius: $\sqrt{21}$

3)

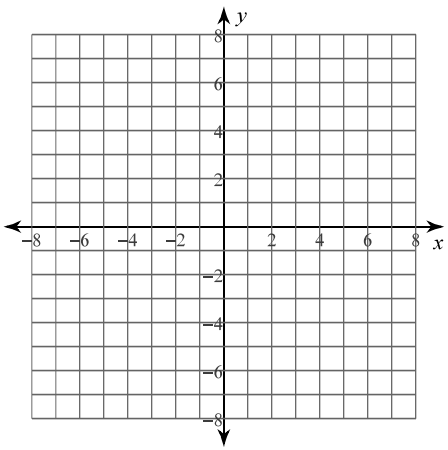


4)

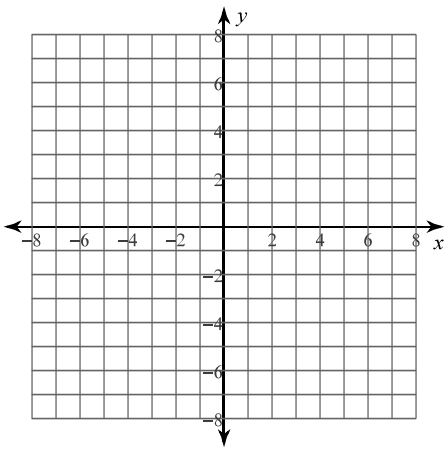


Identify the center and radius of each. Then sketch the graph.

5) $(x-2)^2+(y+2)^2=25$



6) $(x+1)^2+(y+3)^2=4$



Equation of a Circle: $(x-h)^2+(y-k)^2=r^2$

DISTANCE FORMULA: $d=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$ MIDPOINT FORMULA: $M=\left(\frac{x_1+x_2}{2},\frac{y_1+y_2}{2}\right)$

7. Using the distance formula, write the equation of a circle whose center is (3, -7) and goes through (10, -4).

8. Give the equation whose endpoints of the diameter are (-2, 5) and (8, -3).

STANDARD FORM: $(x-h)^2+(y-k)^2=r^2$ GENERAL FORM: $ax^2+by^2+cx+dy+e=0$

9. Convert the following equation to general form: $(x-1)^2+(y+2)^2=9$

10. Convert the following equation to standard form: $x^2+y^2+24x+2y+129=0$