Math III – Unit 5 Quiz REVIEW

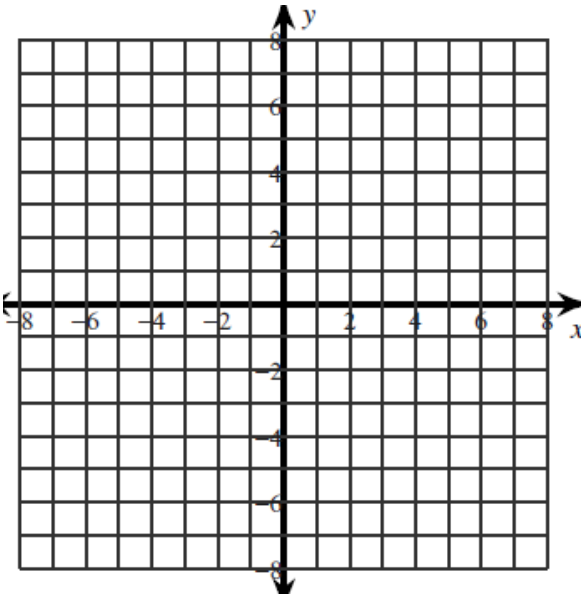
Name: _____

1. Graph and label the center and radius.

$x^2 + (y + 4)^2 = 36$

Center: _____

Radius: _____

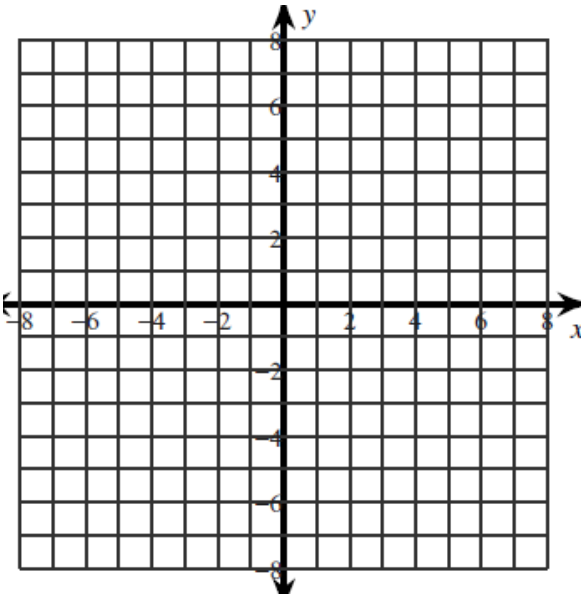


2. Graph and label the center and radius.

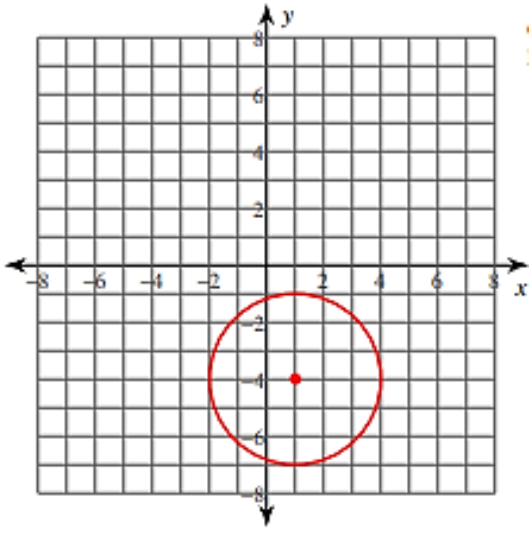
$x^2 - 6x + y^2 + 4y - 3 = 0$

Center: _____

Radius: _____



3. Identify the center and radius. Then write an equation for the circle.



Center: _____ Radius:_____

Equation: _____

4. Write the equation of the circle in standard form and then find the center and radius of the circle.

$16 + x^2 + y^2 - 8x - 6y = 0$

Standard Form:_____

Center:_____ Radius:_____

5. Write the standard form for a circle with a center at (-13, -16) and a point on the circle (-10,-16).

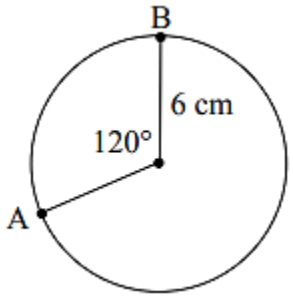
Equation: _____

6. Write the equation for the translation.

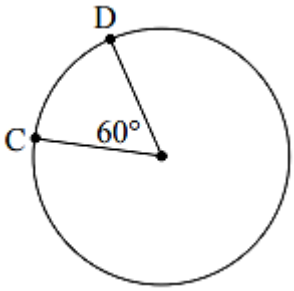
$(x-1)^2 + (y+7)^2 = 25$ right 4 units, up 3 units

Equation: _____

7. Find the arc length of AB.



8. The dimeter is 24 cm. Find the arc length of CD.



9. A circle has a radius of 12. Find the area of the sector whose central angle is 120°.

10. Find the radius of a circle which has a sector area of 9π whose central angle is 90°.

11. The central angle of a sector is 72° and the sector has an area of 5π. Find the radius.