Math 3 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
2-1Equations of Circles Homework **NO CALCULATOR!!!!**

1. Find the equation of a circle whose center is at the point (-2, 3) and has a circumference of .
2. Find the equation of a circle that is tangent to both the x and y-axis and has an area of  and whose center is in the second quadrant.
3. Find the equation of a circle whose center is at the point (-3, 6) and is tangent to the y-axis.
4. Find an equation of a circle whose center is at the point (-4, 6) and passes through the point (1, 2).
5. Find the center and radius of the circle whose equation is given by 
6. Determine the diameter of the circle whose equation is 
7. Determine the area of the circle whose equation is 
8. Write  in standard form.

1. Challenge problem – No Calculator

Find the points of intersection of the circle with equation  and the line with equation .