

Review Sheet – 3

Circles and Parabola

1. Find the center and radius of the circle given by the equation $x^2 + y^2 + 4x - 6y + 9 = 0$.

Draw the graph, label the 4 points on the graph with the coordinates.

2. Given; Center = (3, 4), radius = 5 units.

Find the equation of the circle.

3. Find the center and radius of the circle with the equation: $x^2 + y^2 + 8x - 2y - 32 = 0$.

Graph the circle and label 4 points with their coordinates.

4. Solve the quadratic equation $-x^2 + 8x - 2 = 0$. Graph the function and label the x – intercepts on your graph.

5. Given $\Theta = 300^\circ$, Find $\sin(300)$.

- a) Identify the quadrant.
- b) Find the reference angle.
- c) Calculate the exact value.

6. Given, $\cos \theta = \frac{1}{2}$, $\tan \theta = \text{negative}$. Find the value of $\sin \theta$. Show the picture.

7. P (3, -2) is a point on the terminal side of θ . Find all trig values of θ . Show the picture.

