1. Mark the points $P_1(1, -4)$ and $P_2(-5, 2)$ on a coordinate plane. Determine the distance between the two points.

2. Graph the following equation by plotting the points. Determine the x- and y-intercepts and then mark the points on your graph.
$$x = |y - 1| + 1$$

($|x|$ means the absolute value of x)

3. Mark the point $P(1, 2)$ on a x-y plane. Determine the points on the x-axis that are distance 3 away from P and mark them on the coordinate plane.

4. Write an equation of a circle centered at $(1, 0)$ with a radius 3.

5. Put the following equation of a circle in the standard form

$$x^2 + 6x + y^2 - 2y + 7 = 0$$