WRITING THE EQUATION OF A CIRCLE: GUIDED NOTES

**Explain**

	Equation of a Circle
	$$x^2 + y^2 = r^2$$
	center: $(0, 0)$
	radius: r

	Equation of Any Circle
	$$(x - h)^2 + (y - k)^2 = r^2$$
	center: (h, k)
	radius: r
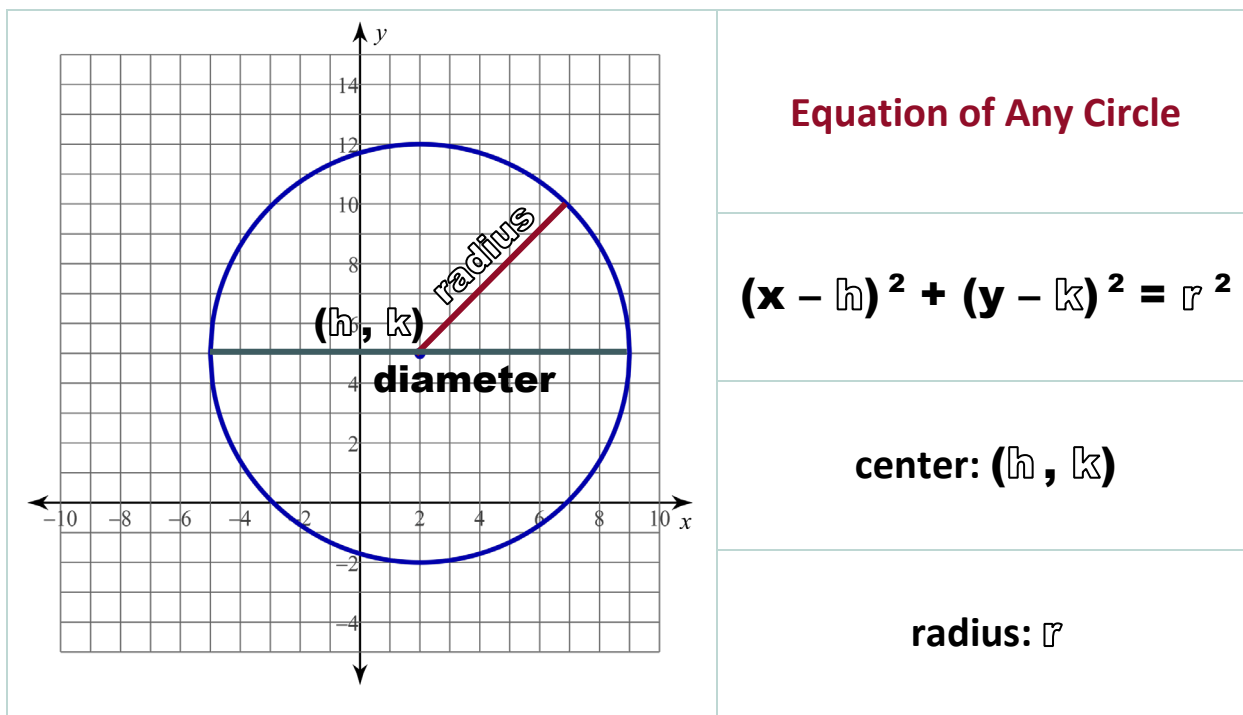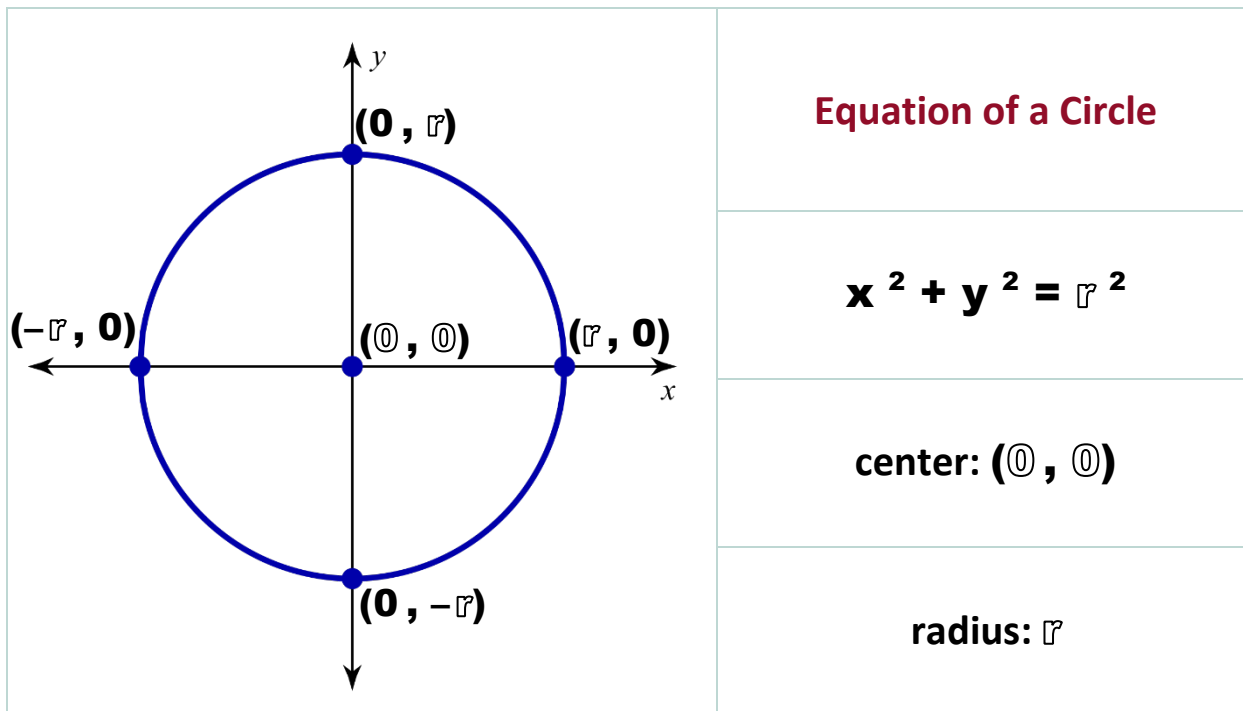
1) Write the equation of a circle that has $(-6, 1)$ and $(4, 9)$ as the endpoints of its diameter.

2) What is the center and what is the radius of $(x+4)^2 + (y-7)^2 = 100$?