## WRITING AN EQUATION OF A CIRCLE GIVEN THE ENDPOINTS OF A DIAMETER

$(x-h)^2 + (y-k)^2 = r^2$	2	Find the center of the circle using the midpoint formula.  Find the radius from the center to an endpoint of the diameter using the distance formula.
	3	Use center and radius to write the equation of your circle in standard form. BOOM!

**EXAMPLE 1:** Find an equation of the circle whose diameter has endpoints (3, -5) and (-5, -1).

**EXAMPLE 2:** Find an equation of the circle whose diameter has endpoints (-2, -4) and (2, -6)