9. If the center of a circle is (5,6) and its radius is 4, then the standard form of the equation for this circle is: Note: r: horizontal axis, c: vertical axis  $(-5 + r)^2 + (-6 + c) = 16$ 

$$(5+r)^{2}+(6+c)^{2}=4$$

$$(-5+r)^{2}+(-6+c)^{2}=16$$

$$(5+r)^{2}+(6+c)^{2}=16$$
Solution

This circle has the center (5,6) with radius 4 So, it has the equation:  $(-5 + r)^2 + (-6 + c)^2 = 16$ 

