9. If the center of a circle is $(3,-2)$ and its radius is 4, then the standard form of the equation for this circle is:

**Note:** m: horizontal axis, c: vertical axis

$(-3 + m)^2 + (2 + c) = 16$

$(3 + m)^2 + (-2 + c)^2 = 4$

$(-3 + m)^2 + (2 + c)^2 = 16$

$(3 + m)^2 + (-2 + c)^2 = 16$

## Solution

This circle has the center $(3,-2)$ with radius 4
So, it has the equation:

$(-3 + m)^2 + (2 + c)^2 = 16$