1. If the center of a circle is $(1,-1)$ and its radius is 3, then the standard form of the equation for this circle is:
Note: r: horizontal axis, c: vertical axis

$(-1 + r)^2 + (1 + c) = 9$

$(1 + r)^2 + (-1 + c)^2 = 3$

$(-1 + r)^2 + (1 + c)^2 = 9$

$(1 + r)^2 + (-1 + c)^2 = 9$

Solution

This circle has the center $(1,-1)$ with radius 3
So, it has the equation:

$(-1 + r)^2 + (1 + c)^2 = 9$