4. If the center of a circle is (1,3) and its radius is 6, then the standard form of the equation for this circle is:

Note: m: horizontal axis, n: vertical axis

**.**, 3.)

$$(-1+m)^{2}+(-3+n)^{2}=36$$
(1+m)<sup>2</sup>+(3+n)<sup>2</sup>=36

Solution

This circle has the center (1,3) with radius 6
So, it has the equation:
$$(-1+m)^{2}+(-3+n)^{2}=36$$

8

6

-2

2

4

-2

 $(-1 + m)^2 + (-3 + n) = 36$ 

 $(1 + m)^2 + (3 + n)^2 = 6$