

4. If the center of a circle is  $(5,1)$  and its radius is 2, then the standard form of the equation for this circle is:

**Note:**  $z$ : horizontal axis,  $q$ : vertical axis

$$(-5 + z)^2 + (-1 + q) = 4$$

$$(5 + z)^2 + (1 + q)^2 = 2$$

$$(-5 + z)^2 + (-1 + q)^2 = 4$$

$$(5 + z)^2 + (1 + q)^2 = 4$$

### Solution

This circle has the center  $(5,1)$  with radius 2

So, it has the equation:

$$(-5 + z)^2 + (-1 + q)^2 = 4$$

