

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

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

$$(-2 + k)^2 + (3 + z) = 4$$

$$(2 + k)^2 + (-3 + z)^2 = 2$$

$$(-2 + k)^2 + (3 + z)^2 = 4$$

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### Solution

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

$$(-2 + k)^2 + (3 + z)^2 = 4$$

