

Write the standard form of the equation of the circle with the given center and radius.

14. center  $(-2, 0)$  and  $r = 3$

**Solution:**

The standard form equation of a circle is  $(x - a)^2 + (y - b)^2 = r^2$  where  $a$  and  $b$  are the x and y coordinates of the center of the circle, and  $r$  is the radius

$$(x - (-2))^2 + (y - 0)^2 = 3^2$$

$$(x + 2)^2 + y^2 = 9$$

**Answer:**  $(x + 2)^2 + y^2 = 9$