## Exercise 4

In Exercises 3-6, match the equation with its graph. [The graphs are labeled (a), (b), (c), and (d).]
(a)

(b)

(c)

(d)


$$
y=\sqrt{9-x^{2}}
$$

## Solution

Square both sides.

$$
y^{2}=9-x^{2}
$$

Bring $x^{2}$ to the left side.

$$
x^{2}+y^{2}=9
$$

This is the graph of a circle centered at the origin with radius 3 .


