

## Exercise 13

For the following exercises, graph the functions by translating, stretching, and/or compressing a toolkit function.

$$f(x) = \sqrt{x+6} - 1$$

### Solution

Start with the parent function.

$$\sqrt{x}$$

Replacing  $x$  with  $x + 6$  shifts the graph to the left by 6 units.

$$\sqrt{x+6}$$

Subtracting 1 shifts the graph down by 1 unit.

$$\sqrt{x+6} - 1$$

