

Exercise 27

For the following exercises, sketch a graph of the function as a transformation of the graph of one of the toolkit functions.

$$f(t) = (t + 1)^2 - 3$$

Solution

The parent function is

$$t^2.$$

Replacing t with $t + 1$ shifts the graph to the left by 1 unit.

$$(t + 1)^2$$

Subtracting 3 from it shifts the graph down by 3 units.

$$(t + 1)^2 - 3$$

