Exercise 29

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

$$k(x) = (x - 2)^3 - 1$$

Solution

The parent function is

$$x^3.$$

Replacing x with $x - 2$ shifts the graph to the right by 2 units.

$$(x - 2)^3$$

Subtracting 1 from it shifts the graph down by 1 unit.

$$(x - 2)^3 - 1$$