Exercise 30

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

$$m(t) = 3 + \sqrt{t+2}$$

Solution

The parent function is

$$\sqrt{t}.$$

Replacing t with $t+2$ shifts the graph to the left by 2 units.

$$\sqrt{t+2}$$

Adding 3 to it shifts the graph up by 3 units.

$$\sqrt{t+2}+3$$