

## Exercise 11

For the following exercises, find the values for each function, if they exist, then simplify.

- a.  $f(0)$  b.  $f(1)$  c.  $f(3)$  d.  $f(-x)$  e.  $f(a)$  f.  $f(a+h)$

$$f(x) = \sqrt{6x + 5}$$

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### Solution

Evaluate each of the functions.

$$f(0) = \sqrt{6(0) + 5} = \sqrt{5} \approx 2.24$$

$$f(1) = \sqrt{6(1) + 5} = \sqrt{11} \approx 3.32$$

$$f(3) = \sqrt{6(3) + 5} = \sqrt{23} \approx 4.80$$

$$f(-x) = \sqrt{6(-x) + 5} = \sqrt{-6x + 5}$$

$$f(a) = \sqrt{6(a) + 5} = \sqrt{6a + 5}$$

$$f(a+h) = \sqrt{6(a+h) + 5} = \sqrt{6a + 6h + 5}$$