Exercise 71

For the following exercises, evaluate the function f at the values $f(-2)$, $f(-1)$, $f(0)$, $f(1)$, and $f(2)$.

$$f(x) = 3 + \sqrt{x+3}$$

Solution

Evaluate the given function at the different values of x.

$$f(-2) = 3 + \sqrt{(-2)+3} = 3 + \sqrt{1} = 3 + 1 = 4$$

$$f(-1) = 3 + \sqrt{(-1)+3} = 3 + \sqrt{2} \approx 4.414$$

$$f(0) = 3 + \sqrt{(0)+3} = 3 + \sqrt{3} \approx 4.732$$

$$f(1) = 3 + \sqrt{(1)+3} = 3 + \sqrt{4} = 3 + 2 = 5$$

$$f(2) = 3 + \sqrt{(2)+3} = 3 + \sqrt{5} \approx 5.236$$