Exercise 72

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

$$f(x) = \frac{x-2}{x+3}$$

Solution

Evaluate the given function at the different values of x.

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

$$f(-1) = \frac{(-1) - 2}{(-1) + 3} = \frac{-3}{2} = -1.5$$

$$f(0) = \frac{(0) - 2}{(0) + 3} = \frac{-2}{3} \approx 0.6667$$

$$f(1) = \frac{(1) - 2}{(1) + 3} = \frac{-1}{4} = -0.25$$

$$f(2) = \frac{(2) - 2}{(2) + 3} = \frac{0}{5} = 0$$