Exercise 231

For the following exercises, evaluate the given exponential functions as indicated, accurate to two significant digits after the decimal.

$$f(x) = 10^x \text{ a. } x = -2 \text{ b. } x = 4 \text{ c. } x = \frac{5}{3}$$

Solution

a. If $x = -2$, then $f(x) = 10^{-2} = 0.010$.

b. If $x = 4$, then $f(x) = 10^4 = 10\,000.00$.

c. If $x = \frac{5}{3}$, then $f(x) = 10^{5/3} \approx 46.42$.