

Exercise 24

For the following exercises, find the average rate of change of the functions from $x = 1$ to $x = 2$.

$$f(x) = 4x - 3$$

Solution

Calculate the average rate of change of $f(x)$ from $x = 1$ to $x = 2$.

$$\begin{aligned}\frac{f(2) - f(1)}{2 - 1} &= \frac{[4(2) - 3] - [4(1) - 3]}{2 - 1} \\ &= \frac{(8 - 3) - (4 - 3)}{1} \\ &= 5 - 1 \\ &= 4\end{aligned}$$