

Exercise 32

Graph $f(x) = 0.5x + 10$. Pick a set of 5 ordered pairs using inputs $x = -2, 1, 5, 6, 9$ and use linear regression to verify that the function is a good fit for the data.

Solution

Just plug in the given values of x to the function.

$$f(-2) = 0.5(-2) + 10 = 9$$

$$f(1) = 0.5(1) + 10 = 10.5$$

$$f(5) = 0.5(5) + 10 = 12.5$$

$$f(6) = 0.5(6) + 10 = 13$$

$$f(9) = 0.5(9) + 10 = 14.5$$

Five ordered pairs are $(-2, 9)$, $(1, 10.5)$, $(5, 12.5)$, $(6, 13)$, and $(9, 14.5)$.

