Exercise 33

Graph $f(x) = -2x - 10$. 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.

$$f(-2) = -2(-2) - 10 = -6$$
$$f(1) = -2(1) - 10 = -12$$
$$f(5) = -2(5) - 10 = -20$$
$$f(6) = -2(6) - 10 = -22$$
$$f(9) = -2(9) - 10 = -28$$

Five ordered pairs are $(-2, -6)$, $(1, -12)$, $(5, -20)$, $(6, -22)$, and $(9, -28)$.