

Compare functions in the different representations by looking at the properties of the functions. Three different functions are shown.

Table	Equation	Graph
<div style="display: flex; justify-content: center; align-items: center; gap: 10px;"> <div style="text-align: center;"> $+1$ $+1$ $+1$ </div> <div style="text-align: center;"> $y = \frac{2}{3}x - 4$ The rate of change is $+\frac{2}{3}$. The initial value is -4. </div> </div> <p>The rate of change is $+2$. The initial value is -1.</p>		<p>The rate of change is $-\frac{1}{2}$. The initial value is 6.</p>

Linear functions can represent both Carla and Parrish's lawn-mowing rates. Carla's lawn-mowing rates are represented by the equation $y = 9.5x + 15$, where x represents the number of hours she works and y represents the cost to her customers. Parrish's lawn-mowing rates are shown in the table. Who charges more per hour?

Hours	1	2	3	4	5
Cost	22	34	46	58	70

1. What is the constant rate of change that represents how much Carla charges each hour?
2. What is the constant rate of change that represents how much Parrish charges each hour?
3. What is the fixed cost that Carla charges?
4. What is the fixed cost that Parrish charges?
5. Who charges more per hour?

On the Back!

6. Justin graphed the points $(2, 6)$, $(3, 12)$, $(4, 20)$, and $(5, 30)$. He says that relation is a linear function. Is Justin correct?