

6.1 Rate of Change and Slope  
6.2 Slope-Intercept Form

To find the rate of change in a table, find the change in the dependent variable over the change in the independent variable.

Number of Days	Rental Charge
1	\$60
2	\$75
3	\$90
4	\$105
5	\$120

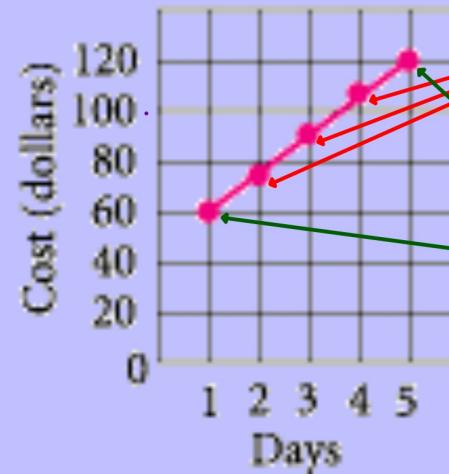
Find the rate of change between days 1 and 2.

Find the rate of change between days 5 and 3.

$$\frac{75 - 60}{2 - 1} = \frac{15}{1} \quad \frac{120 - 90}{5 - 3} = \frac{30}{2} = \frac{15}{1}$$

Finding the rate of change aka "slope" using a graph.

Select two points. Find the change in y over the change in x.



$$\frac{120 - 60}{5 - 1} = \frac{60}{4} = \frac{15}{1}$$

Finding the slope using points.

*add a line + change the sign*

Find the slope of  $\overline{CD}$

C (2,5) and D (4, 7)

$$\frac{7 - 5}{4 - 2} = \frac{2}{2} = 1$$

Find the slope of  $\overline{PQ}$

P (-1, 4) and Q (3, -2)

$$\frac{-2 - 4}{3 - (-1)} = \frac{-2 + -4}{3 + 1} = \frac{-6}{4}$$

Find the slope of  $\overline{MN}$

M (a,b) and N (c,d)

$$\frac{d - b}{c - a}$$

Find the slope of  $\overline{AB}$

A (-2, 1) and B (5, 7)

$$\frac{7 - 1}{5 - (-2)} = \frac{7 + -1}{5 + 2} = \frac{6}{7}$$