

What is slope?

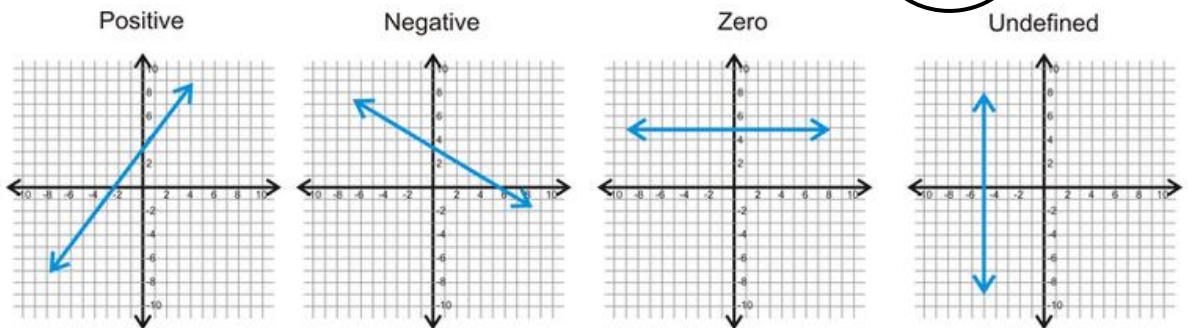


Slope tells how STEEP a line is and whether the relationship between x and y is positive or negative.

Slope is also called the rate of change. It is abbreviated with the letter m.

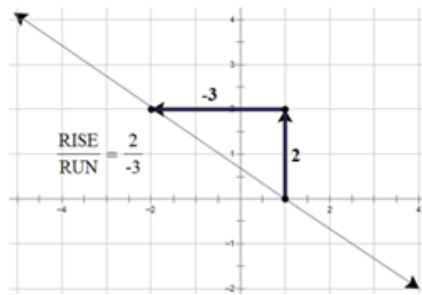
You should always "read" the graph from left to right!

there are four types of slope:



From a graph: $\frac{RISE}{RUN}$

Example:



From a table: $\frac{\text{change in } y}{\text{change in } x}$

Example:

X	Y
-2	0
0	-4
4	-12

$$\frac{\text{change in } y}{\text{change in } x} = \frac{-4 - 0}{2 - (-2)} = \frac{-4}{4} = -1$$

From two points: $\frac{y_2 - y_1}{x_2 - y_1} = \frac{\text{change in } y}{\text{change in } x}$

Example:

$(-5, 8)$ and $(3, 12)$

$$\frac{y_2 - y_1}{x_2 - y_1} = \frac{\text{change in } y}{\text{change in } x} = \frac{12 - 8}{3 - (-5)} = \frac{4}{8} = \frac{1}{2}$$

Or make a table!

From a context: Look for key words!

Words to look for:

per
for each
for every
yearly/monthly/daily