Name:_____ Date:_____

Notes
Algebra Section 4.4
Pages 235-242

Goal: "You will find the slope of a line given two points"
"You will find the slope of a graphed line"
"You will find and interpret rate of change"

Definition

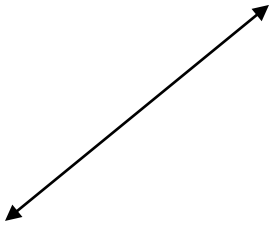
SLOPE -

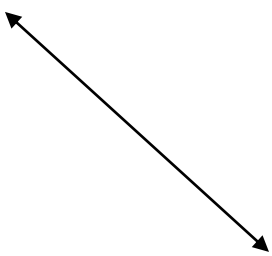
SYNONYM:

Formulas

Formula	When To Use

Direction





Zero vs. Undefined

Find the slope of the line that passes through the given points. (Be sure to write down the formula you are using)

Ex: (5, 2) and (4, –1)

Ex: (–2, 3) and (4, 6)

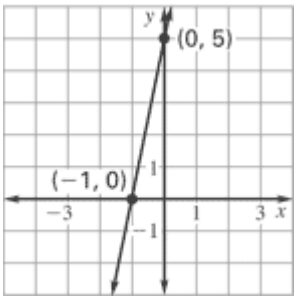
Ex: $\left(\frac{9}{2},5\right)$ and $\left(\frac{1}{2},-3\right)$

Ex: (3, 4) and (–2, 4)

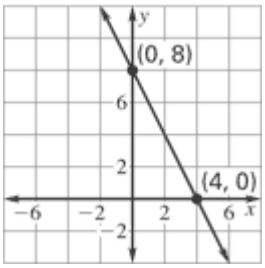
Ex: (–5, 1) and (–5, 3)

Find the slope of the line graphed.

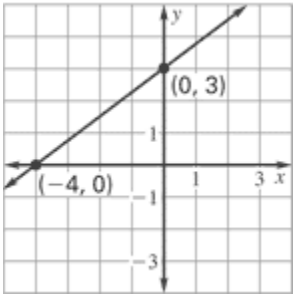
Ex:



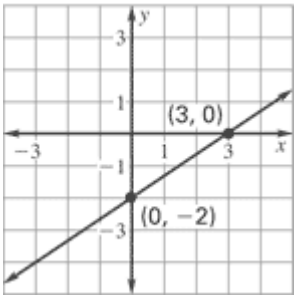
Ex:



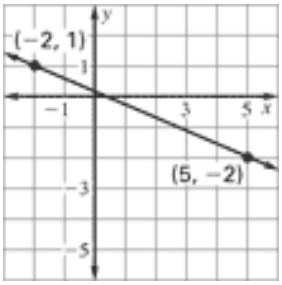
Ex:



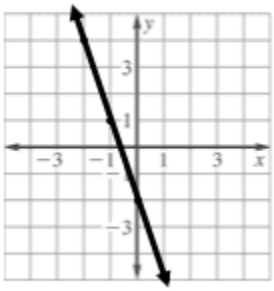
Ex:



Ex:



Ex:



Rate of Change:

Ex: Gas prices went from \$3 to \$4 between June 1st of 2008 and August 1st of that same year. Find the rate of change for the price of gas during that time period?

Ex: Gas prices then began to fall after this spike. They fell back to \$2 by November 19th. What is the rate of change of the price of gas for this time period?

Ex: Which time period had a greater rate of change? Why?

Ex: The table below shows the cost of using a computer at the internet café for a given amount of time. Find the rate of change with respect to time.

Time (hrs)	2	4	6
Cost (\$)	7	14	21