

## Notes 5.3 Unit Rates

unit rate =  $\frac{\quad}{1 \text{ unit}}$

Lesson  
pp. 211-  
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ex.  $\frac{.50}{10 \text{ pounds}} \div 10 = \boxed{\frac{.05}{1 \text{ pound}}}$

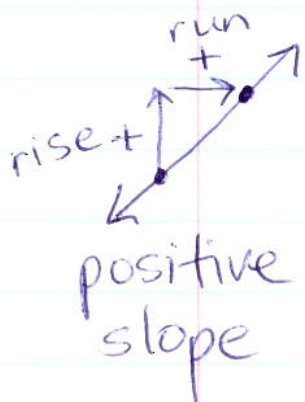
Slope - "m"

- a rate of change

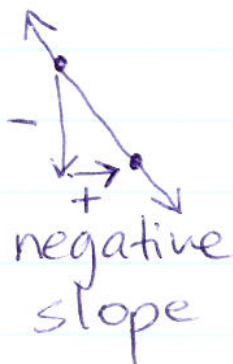
-  $\frac{\text{rise}}{\text{run}}$

- the steepness of a line

- a unit rate  $\frac{m}{1}$



$$\frac{+}{+} = +$$



$$\frac{-}{+} = -$$



zero slope

$$\frac{0}{+} = 0$$




no slope

$$\frac{+}{0} = \emptyset$$

over

~~(x<sub>1</sub>, y<sub>1</sub>)~~

  $(x_1, y_1)$   
 $(x_2, y_2)$

$$m = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

ex.  $(\overset{x_1}{2}, \overset{y_1}{3})$

$(\overset{x_2}{7}, \overset{y_2}{9})$

$$m = \frac{9-3}{7-2} = \frac{6}{5}$$

switch  
order