

LESSON DIGITS 5-1

Proportional Relationships

11/27/2018

Goal: I will be able to **recognize a proportional relationship**

Tool Bag
Formulas, equations,
Vocabulary, etc.

Here's How... Notes & Examples

Proportional Relationship

- 1) In table, the number change by a constant amount
- 2) In a graph, it is straight line that passes through the origin
- 3) In an equation, where $y=kx$
K = constant of proportionality

Example

Sale tax is 9%. Make a table, graph, and equation to represent purchasing an item.

$\begin{array}{r} 250 \\ .09 \\ \hline 22.50 \end{array}$

price	tax
0	0
100	9
200	18
250	22.50
300	27

Tax A

$p = \text{price}$ $t = \text{tax}$
 $t = 0.09p$ $k = 0.09$

Example

You run at a constant rate of 30 feet every 3 seconds. Make a table, graph, and equation.

$d = kt$

time	distance
0	0
3	30
6	60
9	90

$t = \text{time}$ $d = \text{distance}$
 $d = 10t$ $k = 10$