Warm Up:

A pizza place charges $8.00 for a basic cheese pizza and then $1.25 per topping.

a) Write an equation to represent this situation. Be sure to define your variables.

$$C = 1.25n + 8 \quad \text{where } C \text{ is the total cost (\$),}$$
$$n \text{ is the number of toppings}$$

b) Determine how many toppings you could get for $13.00.

$$13 = 1.25n + 8$$
$$13 - 8 = 1.25n + 8 - 8$$

$$1.25n = 5$$
$$\frac{1.25n}{1.25} = \frac{5}{1.25}$$
$$n = 4$$

∴ we could get 4 toppings.

GENERAL FORM OF A LINEAR EQUATION

$$y = mx + b$$

dependent variable

independent variable

y-intercept
fixed value
fixed cost
vertical intercept
initial value

variable cost
slope
rate of change
Constant multiple
constant of variation

y-intercept	b
Independent variable	x
Fixed value	b
Fixed cost	b
Variabe cost	m
Dependent variable	y
Slope	m
Rate of change	m
Vertical intercept	b
Constant multiple	m
Initial value	b
Constant of variation	m
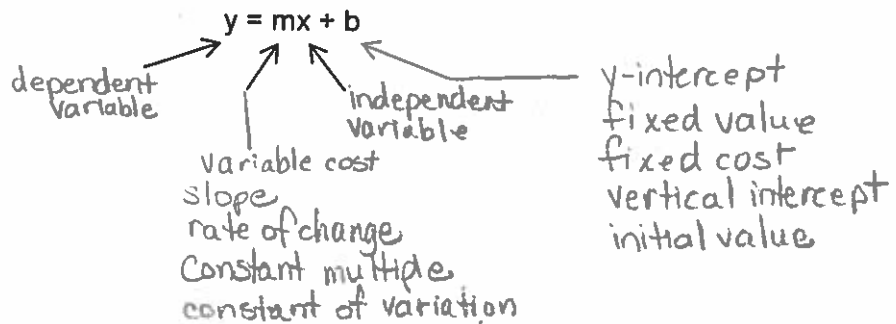
For the Test, I need to know how to:

- Identify if a relation is partial or direct based on words, equation, table of values or graph.
- Identify if a situation is linear given a table of values (by finding first differences and Δx).
- Interpret graphs of linear relations.
- Create a graph for a linear relation.
- Create an equation for a linear relation.
- Determine the slope from a graph, table of values or equation.
- Determine the initial/fixed value (y-intercept) from a graph, table of values or equation.
- Determine values in a linear relation using a graph, table of values or equation.
- Given one point and the slope, determine the location of another point on the line.
- Given one point on the line and the slope, graph the line.

Today's practice Questions:
Pages 288-289 #1-16, Page 290 # 1-10