Proportional Equations:

The equation for a proportional relationship or a direct variation can be written as _____.

Where k represents the _____.

For example: In the equation y=5x, the coefficient 5 would represent the _____

_____ _____ or in other words the _____ _____.

A proportional equation does not have a _____, or has a constant of zero.

I.) The following table describes the relationship between the number of scoops in an ice cream cone (x) and the price of the cone (y)

# of scoops (x)	Price (y)
0	0
1	1 ¾
2	3 ½
3	5¼

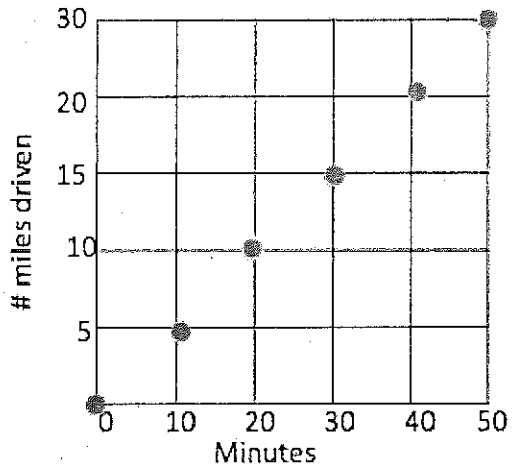
a. What is the constant of proportionality? _____

b. Write an equation to represent this proportional relationship: _____

c. Use your equation to calculate the number of ice cream scoops you could buy with $28.00.

_____

II. The following graph shows the relationship between the number minutes passed, and the number of miles driven.



a. What is the constant of proportionality? Explain what it means

b. Write an equation to represent this proportional relationship: _____

c. Use your equation to calculate the number of miles you would drive in 75 minutes.

_____

III. Which equations below represent a proportional relationship?

a. $y = 5x$ b. $y = 1.5x + 2$ c. $p = 0.5m$ d. $c = 6 + 3d$

e. $y = \frac{1}{2}x$ f. $m = 3n$ g. $y = 9 - 5x$ h. $t = \frac{1}{4}x - 10$

In Summary:

A table represents a proportional relationship if: • •	A graph represents a proportional relationship if: • •	An equation represents a proportional relationship if: •
Examples:	Examples:	Examples:
Non-Examples:	Non-Examples:	Non-Examples: