

## Unit 5: Linear Relations I (Chapter 5 in textbook!)

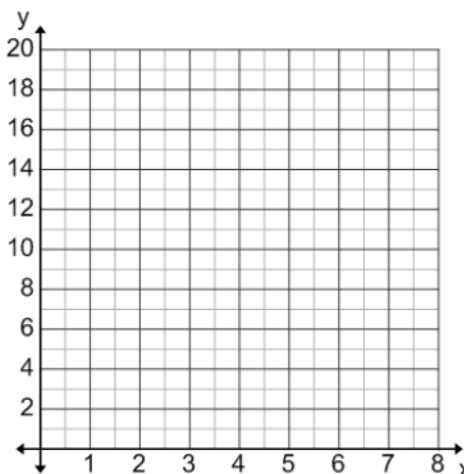
Day 5 - Partial Variation

Today we will...

1. Define partial variation.
2. Determine how to identify problems involving partial variation.
3. Differentiate between direct and partial variation.

Ex. 1 A medium pizza costs \$7 plus \$1.50 per topping.

- a) Identify the fixed cost and the variable cost.
- b) Determine the equation relating cost,  $C$ , in dollars and the number of toppings,  $n$ .
- c) Use the equation to determine the cost of a medium pizza with 6 toppings.
- d) Graph this partial variation relation.



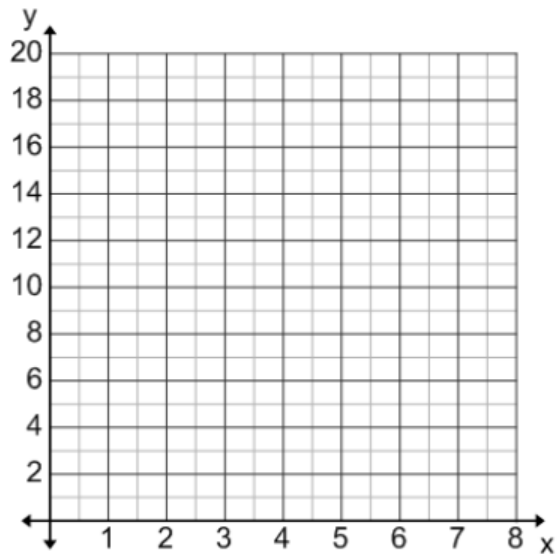
Ex. 2 a) Copy and complete the table of values given that  $y$  varies partially with  $x$ .

$x$	$y$
0	10
1	12
2	
	16
4	
	20

b) Identify the initial value of  $y$  and the constant of variation (i.e. slope!).

c) Write the equation in the form of  $y = mx + b$ .

d) Graph the relation.



e) Describe the graph

Summarizing Partial Variation:

	Looks Like...	Example
Equation		
Graph		

Understanding the Difference - Examples

Partial

Neither

Direct