

Name: _____

Date: _____ Group: _____

Additional Exercises

1. Complete the table below for each of the following situations.
 - a) A caterer wants to figure out how many utensils to bring to a reception given the number of guests that will be served.
 - b) A landscaper must determine the number of trees to buy based on the length of the hedge to be planted.
 - c) A manufacturer wants to calculate profit based on sales if the profit margin is 32%.
 - d) A customer wants to figure out the price she will pay for various items on sale if the discount is 15%.
 - e) Gisele wants to calculate the price she will have to pay for her purchases, taxes included, after a change in the tax rate, which is now 0.1395.

	Dependent Variable	Independent Variable	Rate of Change
a)			
b)			
c)			
d)			
e)			

2. a) The tables of values below establish relations between the number of players and the number of cards dealt to each player. Complete these tables of values.

Game A

Number of Players	Number of Cards
2	8
3	8
4	8
5	
6	

Game B

Number of Players	Number of Cards
2	24
4	12
6	8
8	
12	

- b) If x represents the independent variable and y represents the dependent variable, what is the rule of the relation representing Game A? _____
- c) Is the relation representing Game B increasing or decreasing? _____

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Additional Exercises (continued)

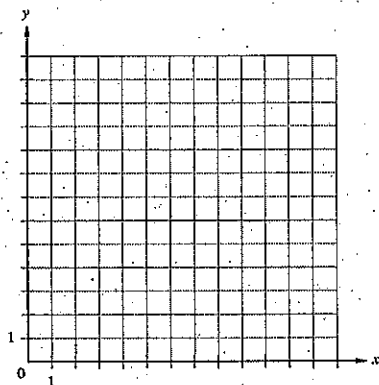
3. a) Complete the table below, which presents four relations.

	Equation	Rate of Change	Increasing or Decreasing Relation?
1)	$y = -2 + 3x$		
2)	$y = -\frac{2}{5}x + 4$		
3)	$y = 1,5$	0	
4)	$3x + 2y = 6$		

b) For each of the relations, create a table of values containing three ordered pairs of values, then use a graph to represent the relation.

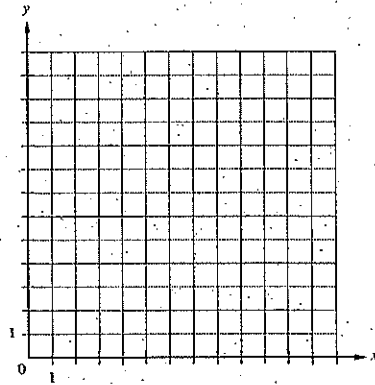
1)

x	y



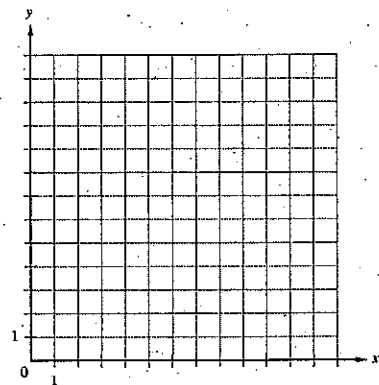
3)

x	y



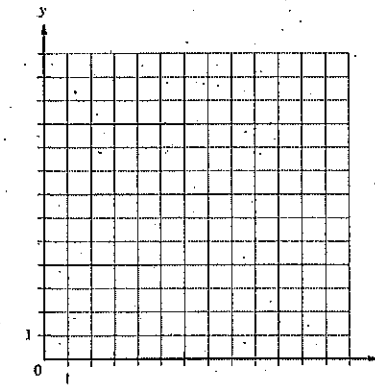
2)

x	y



4)

x	y



Several possible answers. The three ordered pairs are given as examples.