Name _____ Sect _____

SHOW WHAT YOU KNOW. SHOW SET-UP AND SUPPORTING WORK WHEN APPLICABLE.

Multi Step Equations

Solve for the missing variable. Show all work (2 pts each)

$\frac{2p}{5} + 6 = 16$

$24 = \frac{q}{3} + 19$

2 (r + 4) = 3 (2r – 8)

3x + 6 + 5x = 105

3y + 6 = 5y + 104

2 (3z – 4) = 10

6a – 2 (a – 5) = 2a – 12

½ (6b – 10) + 2b = b + 3

Functions

Identify whether the following tables represent functions or non-functions: (1 pt each)

x	y
-2	3
-4	4
-6	5
-8	6
-10	7

_____

x	y
-3	8.5
3	8.5
1	8.5
0	8.5
-1	8.5

_____

x	y
-7	42
-7	40
-7	38
-7	36
-7	34

_____

The following equations all represent functions. Identify which functions are linear vs. nonlinear functions. (1 pt each)

$f(x) = 2x - 3.5$ _____

$f(x) = 3x^2 - 10x - 8$ _____

$f(x) = 3x + 5 - x$ _____

$f(x) = x(2x + 4)$ _____

Frequency Tables

What is a frequency table?

_____

Complete this frequency table

Do You Buy Lunch at School?

	Yes	No	Total
6th grade students		5	85
7th grade students		17	
8th grade students	46		
Total	183		220

Do more students buy lunch at school or bring their lunch with them? _____

Turn this frequency table into a relative frequency table with respect to the students.

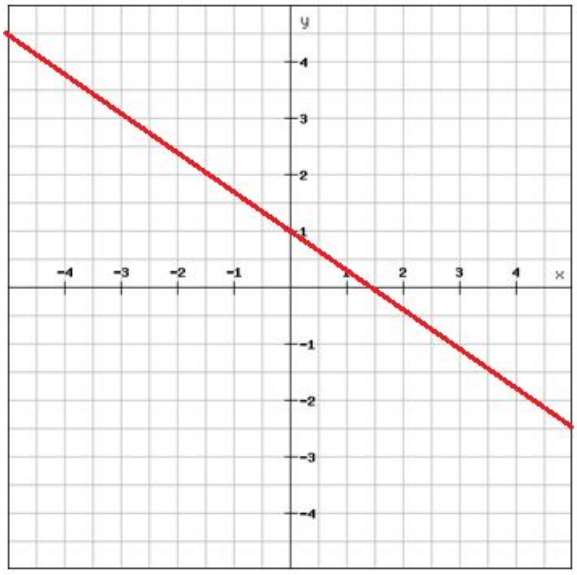
Do You Buy Lunch at School?

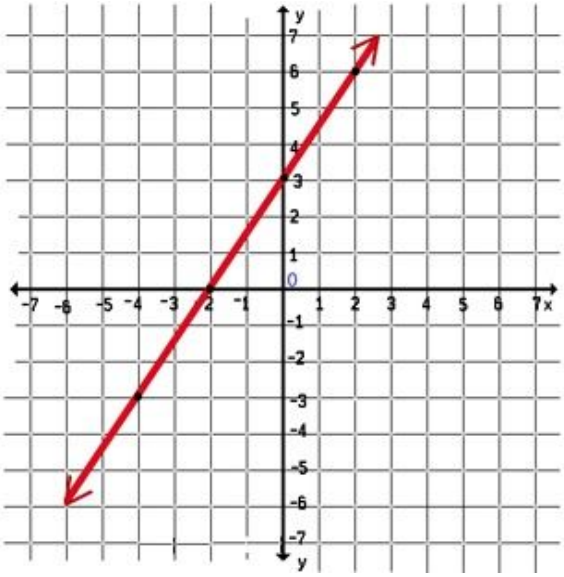
	Yes	No	Total
6th grade students			
7th grade students			
8th grade students			
Total			

Should the “total row” or the “total column” be equal to 100%? _____

Linear Equations

Based on the following graphs below, write a linear equation in slope-intercept form for each graph (3 pts each)





m = _____

b = _____

equation = _____

m = _____

b = _____

equation =_____

Are the following ordered pairs solutions to the given linear equations? (2 pts each)

Show all work.

(9, 2); y = 2x – 8

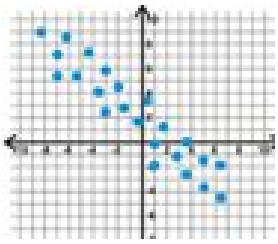
(-5, 3); y = -x – 2

(3, -6); y = x – 7

SCATTER PLOTS

1. What is a scatter plot?_____

2. Label each of the following as positive, negative, or no correlation.



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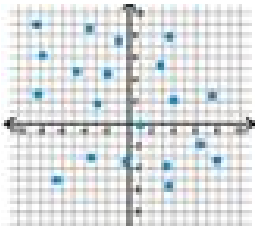

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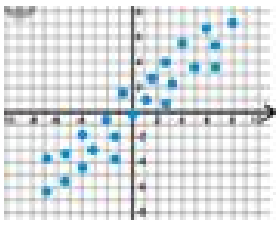
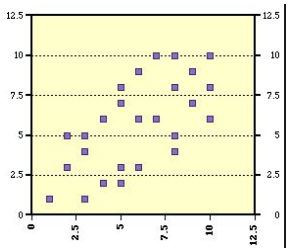
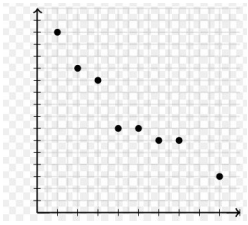


_____

3. Define trend line (Line of Best Fit) _____

4. Draw a trend line through each scatter plot. Also label weak or strong, positive or negative.





5. Use the trend line below to determine how much an incoming coach with 10 years of coaching experience should make. _____ Use the trend line to determine how much a coach should make when he's accumulated 25 years of coaching experience. _____