1. Scatter plots can be used to look for _____ or relationships.

2. What kind of trend is shown when one set of values increases as the other set decreases?

3. What kind of trend is shown when one set of values increases as the other set also increases?

4. What kind of trend is shown when the points show no relationship?

5. Determine whether a scatter plot of the following sets of data show a positive, negative, or no correlation.
   - Person's height and telephone number _____
   - Time spent studying and grades on a test_____
   - The number of pay-per-view movies ordered and the cable bill _____

Each point on the graph below represents a different bag of sugar. Use the graph and points to answer questions 6-9.

Bags of Sugar
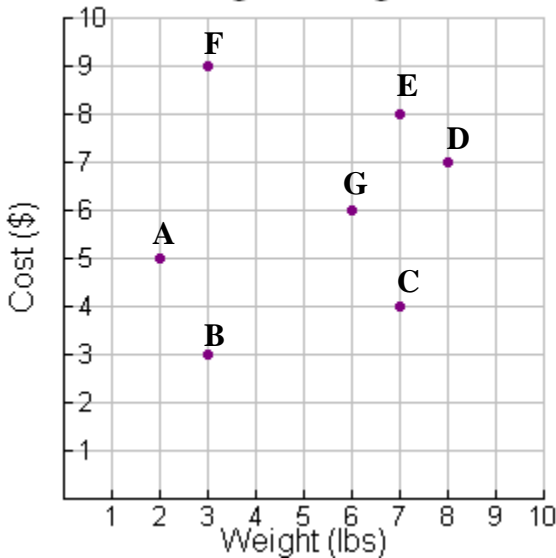
6. Which bag is heaviest? _____

7. Which bag is the least expensive? _____

8. Which bags cost the same price? _____

9. Which bags give the same value for the money?

How do you know?

Bag	Cost($)	Weight (lbs)	Cost per pound
A			
B			
C			
D			
E			
F			
G			

10. A salesman at the local car dealership estimated the number of SUVs that he would sell for a ten month period. He also recorded the actual number of sales he made. The results are given below.

Month	Estimate of SUVs sold	Actual number of SUVs sold
January	2	3
February	5	4
March	5	3
April	9	11
May	12	9
June	8	10
July	13	16
August	14	13

Use your graphing calculator to find the equation for the line of best fit. m = _____ b = _____

Write the equation here _____

11. The table shows a data set that is obtained by collecting information about ages and heights of a group of children. Display the data by creating a scatter plot.

- Give the scatter plot a title.
- Label the x and y axes with age and height.
- What is the independent variable?

- What is the dependent variable?

- Draw a line of best fit.

- Choose two points on the line to write an equation for the line of best fit.

- The data shows what type of correlation?

Neighborhood Children

Age (yrs)	Height (in)
3	36
5	40
8	45
11	56
12	64
10	56
12	64
10	52
4	37
9	51
6	42
7	44
11	60
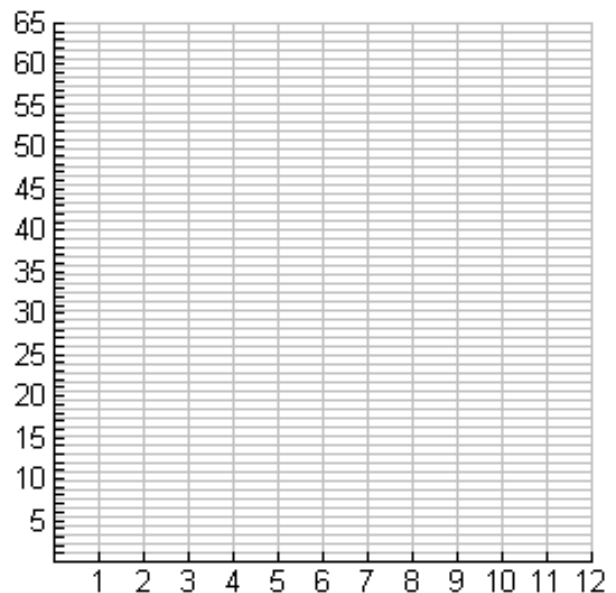
12. Students at an elementary school are surveyed as to whether they buy lunch from the cafeteria on a regular basis. Use the table below to *determine the grade level with the greatest percentage of students who buy lunch at school.*

Grade Level	Yes	No	Total
K	10	40	
2	70	60	
3	30	10	
5	30	70	
Total			

a) K   b) 2   c) 3   d) 5

13) The scatter plot shows the capacity of a refrigerator and the cost. Using the scatter plot and trend line, predict the capacity for a refrigerator that costs $600.

A. 15 cubic feet

B. 13 cubic feet

C. 18 cubic feet

D. 25 cubic feet

Cost and Capacity of the Refrigerators