Name: _____ Date: _____ Hour: _____

Statistics & Probability – 8.SP.1

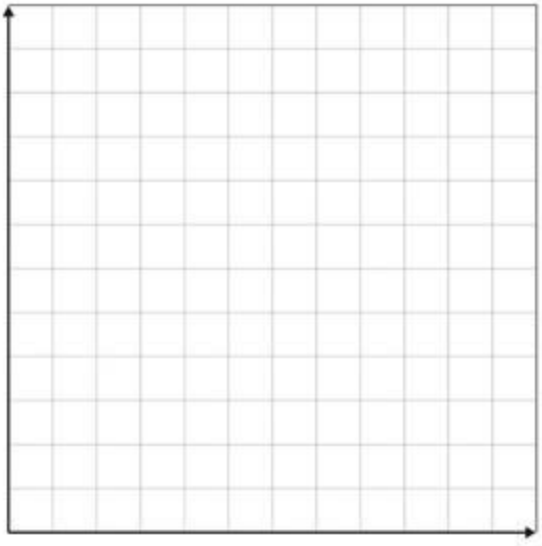
Match the following terms to the correct definition:

?	1. Positive Association	A.	Points that are grouped closely together
?	2. Negative Association	B.	Independent and dependent variable are both increasing
?	3. Cluster	C.	In a graphical format this type of association is connected in a straight line
?	4. Outlier	D.	In a graphical format this type of association is not a straight line, could be a curve.
?	5. Linear Association	E.	Point that varies greatly from all other data points
?	6. Non-Linear Association	F.	Dependent variable decreases as the independent variable increases.

Construct a scatter plot of the following given information showing the amount of time students spend doing homework per week and their overall GPA in school. Be sure to label the graph and answer any other questions.

7.

Time (hours)	2	4	6	8	10	15
GPA	1.4	3.2	2.5	3.0	3.4	3.8



Insert Label

Insert Label

A. Does this graph have a positive or negative association?

Insert Answer Here

B. Does this graph have a linear or nonlinear association?

Insert Answer Here

C. Does this graph have any outliers? If so, explain what the outlier is and why.

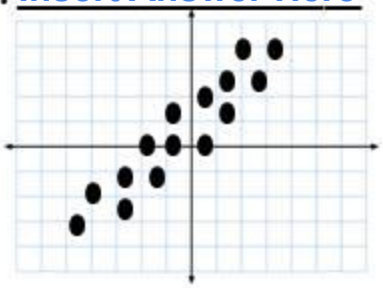
Insert Answer Here

Name: _____ Date: _____ Hour: _____

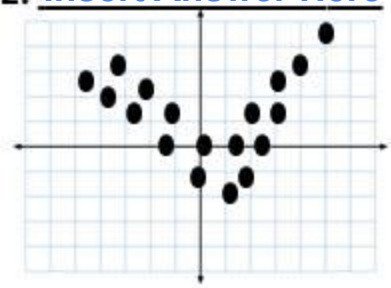
Statistics & Probability – 8.SP.1

Describe the pattern found in the following scatterplots as linear or nonlinear.

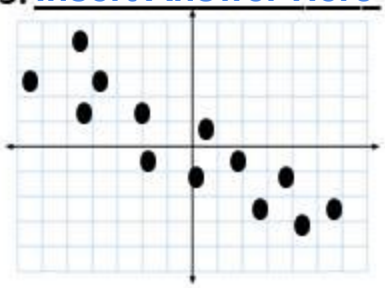
1. Insert Answer Here



2. Insert Answer Here

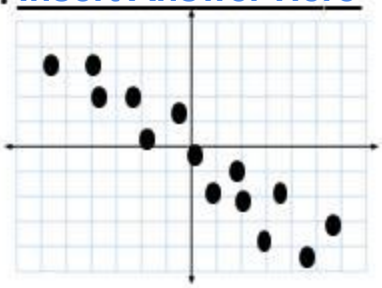


3. Insert Answer Here

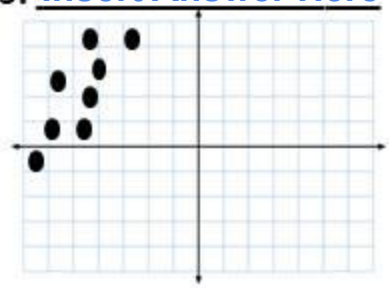


Determine if the following scatterplots have a positive or negative association.

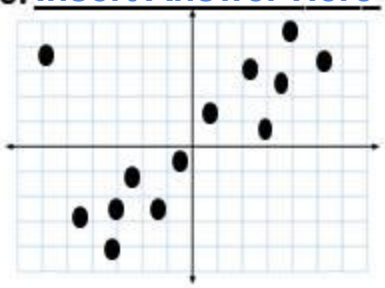
4. Insert Answer Here



5. Insert Answer Here

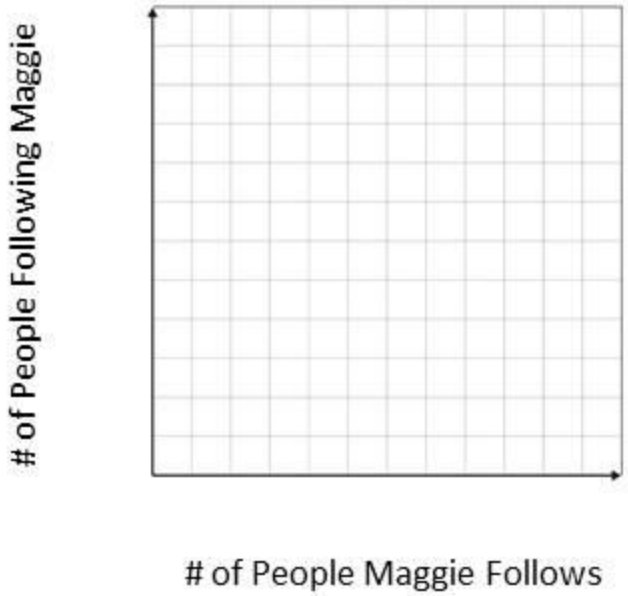


6. Insert Answer Here



7. Maggie collected data each week to determine if the number of people she followed impacted the number of people following her. Use the data given to construct a scatterplot and answer the following questions.

# of people Maggie Follows	# of People Following Maggie
0	0
20	14
40	30
60	52
80	65
100	85



A. Is there a positive or negative association? Insert Answer Here

B. Is the scatterplot linear or nonlinear? Insert Answer Here

C. What does the data collected tell Maggie about the impact of the number of people she follows?

Insert Answer Here