



Objective: Scatter plots and the line of best fit

Homework ST-5 – Worksheet

Do Now: Find the mean and standard deviation using a TI: 75, 93, 98, 83, 91, 93, 86, 60, 68, 92, 79

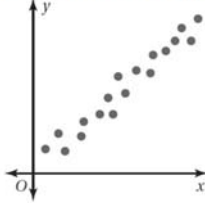
Exam Prep: A set of data has a very large standard deviation

- A) the data is widely spread B) the data is not spread that much C) the mean is skewed left D) all of the above

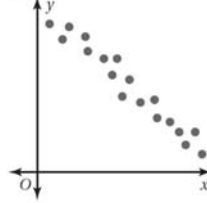
A scatter plot shows a relationship between two sets of data.

A line of best fit shows the best estimation of all plotted coordinate data. It's used to predict values not in the dataset.

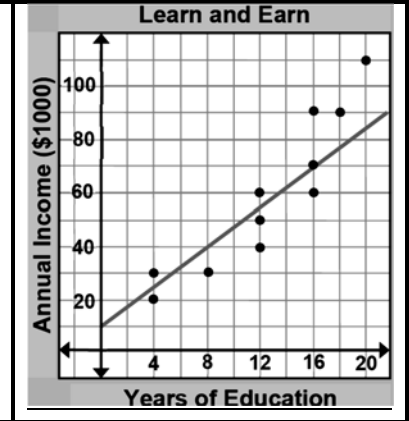
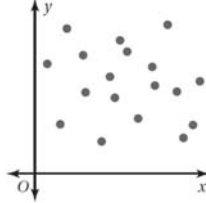
Positive Relationship



Negative Relationship



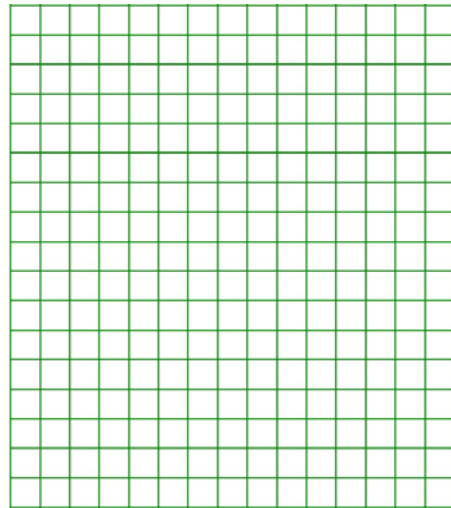
No Relationship



DVD Sales

Week (x)	Sales in millions (y)
1	16
2	15
3	13
4	11
5	10
6	7
7	7
8	6

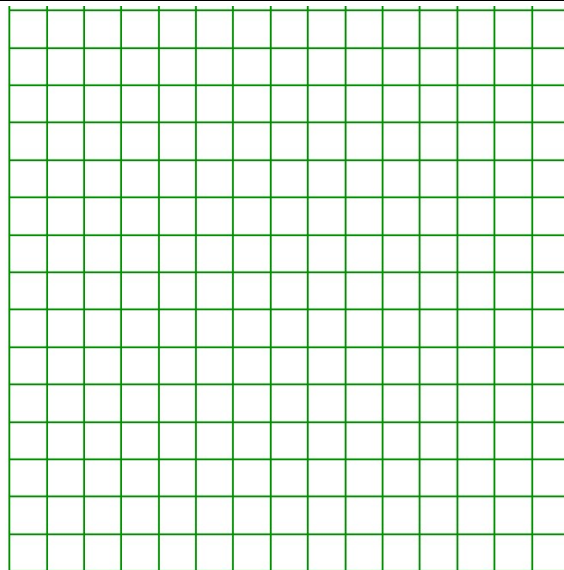
Make a scatter plot and draw a line of best fit. What is the relationship?



Pets Owned and Owner Age

Owner Age (x)	Pets Owned (y)
34	4
12	3
21	2
53	2
70	1
11	3
30	0
35	4
46	6
15	2

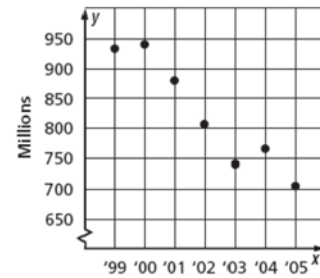
Make a scatter plot and draw a line of best fit. What is the relationship?



Name: _____ Per: _____

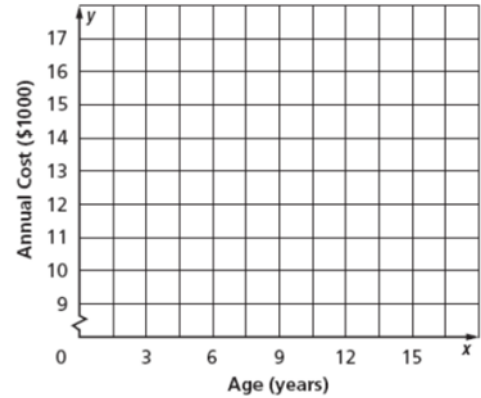
Date: _____

1. **MUSIC** The scatter plot shows the number of CDs (in millions) that were sold from 1999 to 2005. If the trend continued, about how many CDs were sold in 2006?

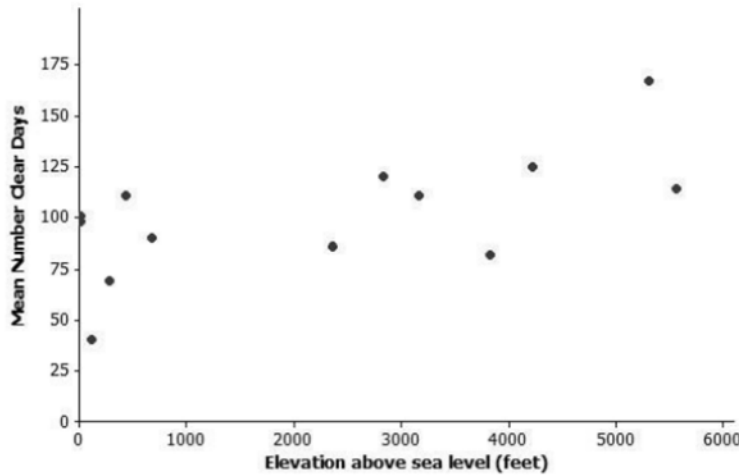


2. **FAMILY** The table below shows the predicted annual cost for a middle income family to raise a child from birth until adulthood. Draw a scatter plot and describe what relationship exists within the data.

Cost of Raising a Child Born in 2003					
Child's Age	3	6	9	12	15
Annual Cost (\$)	10,700	11,700	12,600	15,000	16,700



3. Draw the line of best fit.



Month, x	0	1	2	3	4	5	6	7
Length (in.), y	22.0	22.5	23.5	25.0	26.0	27.5	28.5	29.5

Use the following steps to predict the baby alligator's length next September.

- Graph the data in the table.
- Draw the straight line that you think best approximates the points.

