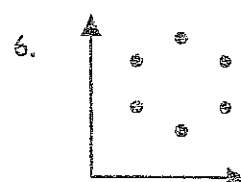
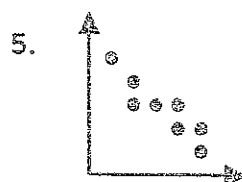
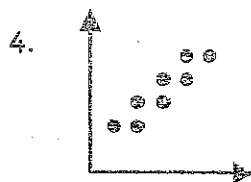
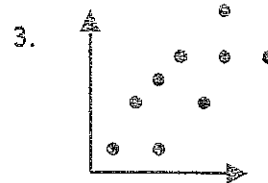
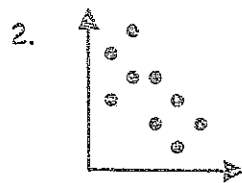
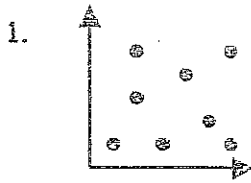


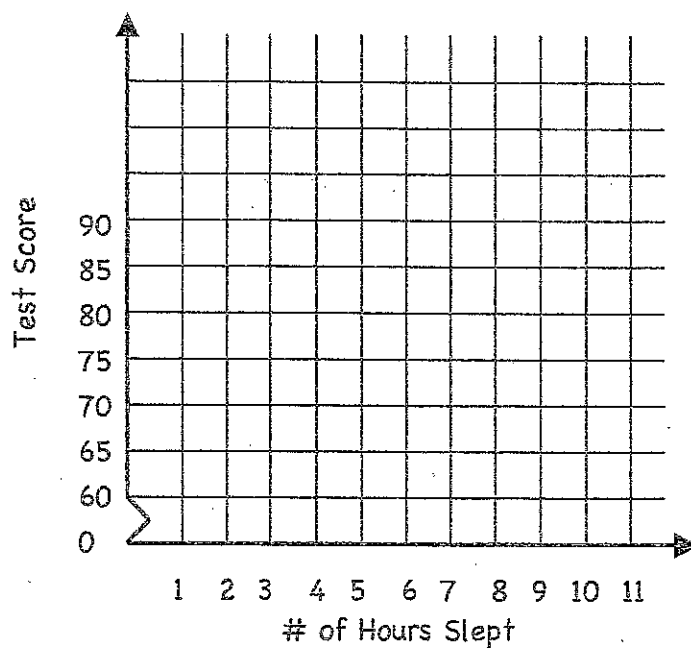
## Practice with Scatter Plots

Classify the scatter plots as having a positive, negative, or no correlation.



7. A history teacher asked her students how many hours of sleep they had the night before a test. The data below shows the number of hours the student slept and their score on the exam. Plot the data on a scatter plot.

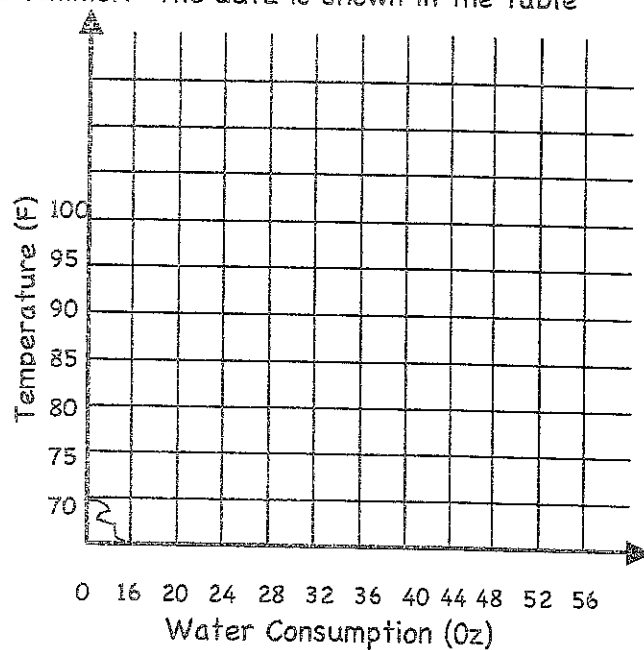
Hours Slept	8	7	7	8	6	5	7	4	9	7
Test Score	83	86	74	88	76	63	90	60	89	81



Write an equation for the line of best fit.

8. Assume that during a three-hour period spent outside, a person recorded the temperature and their water consumption. The experiment was conducted on 7 randomly selected days during the summer. The data is shown in the table below.

Day	Temperature (F)	Water Consumption (oz)
1	99	48
2	85	27
3	97	48
4	75	16
5	92	32
6	85	25
7	83	20



Create a scatter plot with the data. What is the correlation of this scatter plot? (Hint: Do not use the day on the scatter plot.)

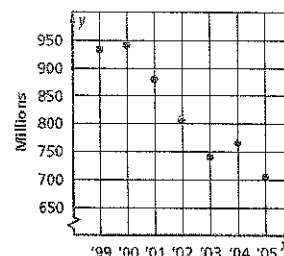
Identify the data sets as having a positive, a negative, or no correlation.

8. The number of hours a person has driven and the number of miles driven
9. The number of siblings a student has and the grade they have in math class
10. The age of a car and the value of the car
11. The number of weeks a CD has been out and the total sales
12. The number of years a person went to school and their income
13. The number of songs downloaded on your i-pod and the amount of memory available
14. The amount of time spent on the computer instant messaging your friends and the number of computers in your house
15. The age of a house and the number of people living in the house
16. Write an equation for the line of best fit.

Name \_\_\_\_\_ Hour \_\_\_\_\_ Date \_\_\_\_\_

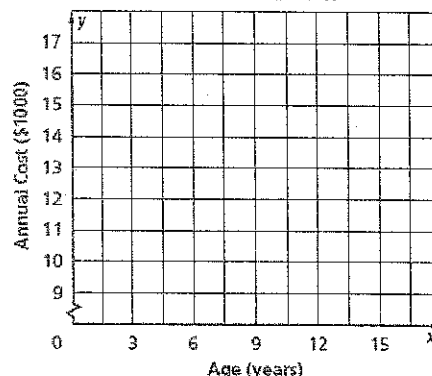
## Scatter Plots and Lines of Best Fit Worksheet

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?



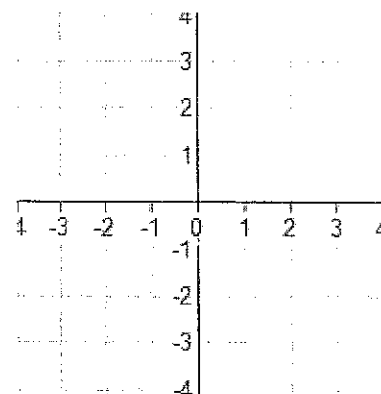
2. **FAMILY** The table below shows the predicted annual cost for a middle income family to raise a child from birth until adulthood. Draw a scatter plot and describe what relationship exists within the data.

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. Make a scatter plot of the data in the table. Draw a line of best fit. What is the equation of the line of best fit?

X	-2	-2	-1	0	1	1	1	2	2	3
Y	2	3	2	1	0	1	-1	-1	-2	-2



4. **EDUCATION** The table at the right gives the number of hours spent studying for a science exam and the final exam grade.

Study Hours	3	2	5	1	0	4	3
Grade	84	77	92	70	60	90	75

- Draw a scatter plot of the data and draw in the line of best fit.
- What is the equation for the line of best fit?
- Predict the grade for a student who studied for 6 hours.
- Could this line go on forever? Why or why not?

