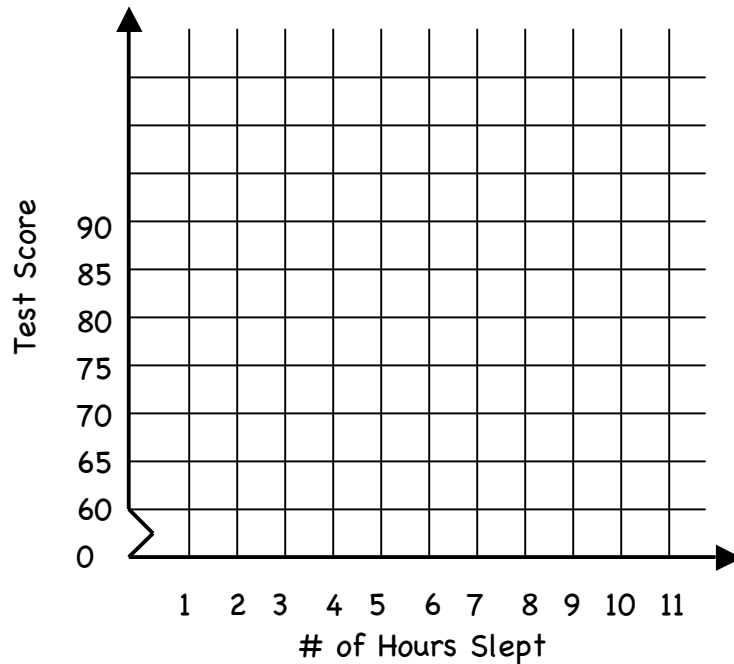


## Practice with Scatter Plots

1. 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.

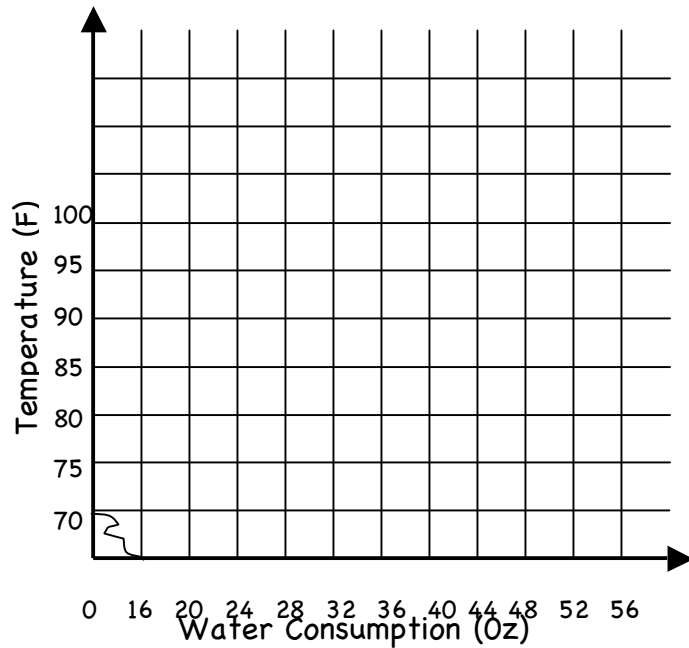
Hours Slept	8	7	7	8	6	5	7	4	9	7
Test Score	83	86	74	88	76	63	90	60	89	81



- a. Describe the Correlation.
- b. Estimate the value of the correlation coefficient,  $r$ . Indicate whether  $r$  is closest to -1, -0.5, 0, 0.5 or 1.
- b. Draw the Line of Best Fit.

2. 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. (Hint: Do not use the day on the scatter plot.)

- Describe the Correlation.
- Estimate the value of the correlation coefficient,  $r$ . Indicate whether  $r$  is closest to -1, -0.5, 0, 0.5 or 1.
- Draw the Line of Best Fit.