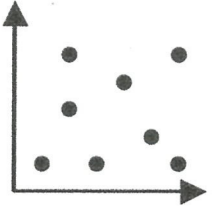
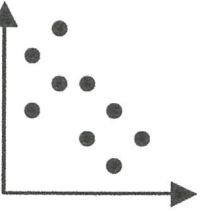
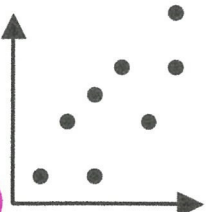
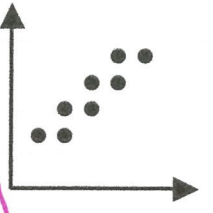
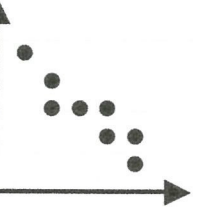
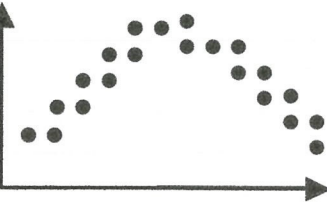


ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

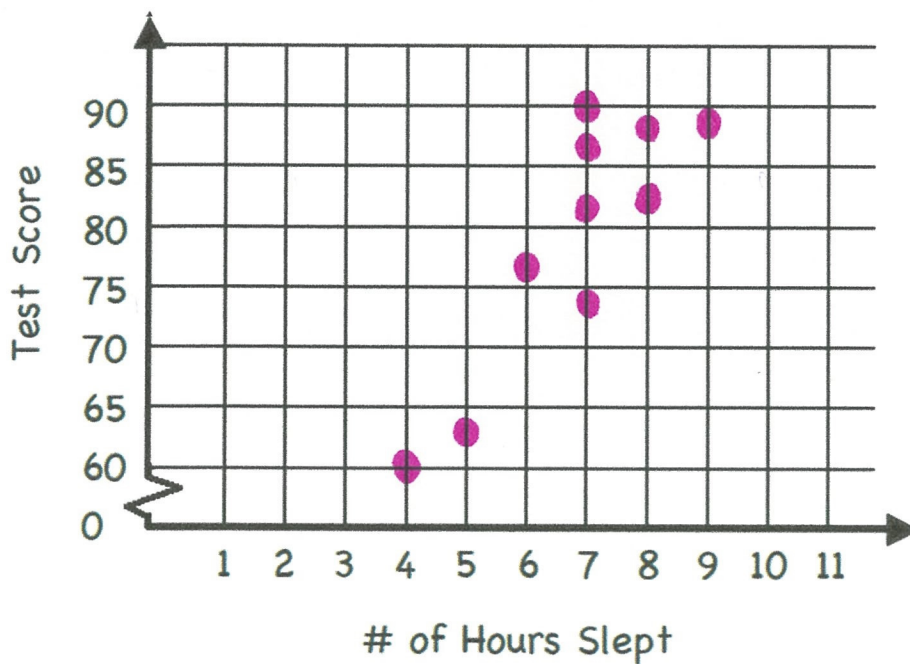
WS 6B.1 - Scatter Plots

Classify each scatter plot as having positive correlation, negative correlation, nonlinear correlation, or no correlation.

<p>1.</p>  <p>no correlation</p>	<p>2.</p>  <p>negative correlation</p>	<p>3.</p>  <p>(weak) positive correlation</p>
<p>4.</p>  <p>(strong) positive correlation</p>	<p>5.</p>  <p>negative correlation</p>	<p>6.</p>  <p>nonlinear correlation</p>

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 his/her score on the exam. Plot the data on a scatter plot.

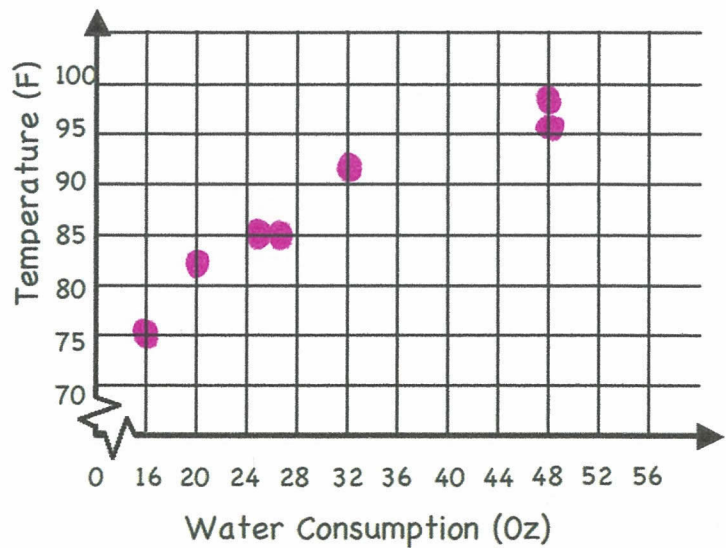
Hours Slept	8	7	7	8	6	5	7	4	9	7
Test Score	83	86	74	88	76	63	90	60	89	81



positive correlation

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

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



positive correlation

Predict whether each description would result in a positive, negative, or no correlation.

9. the number of hours a person has driven and the total number of miles driven

positive correlation (as hours go up, miles go up)

10. the number of siblings a student has and the grade he/she has in math class

no correlation (number of siblings has no effect on math grade)

11. the age of a car and the value of the car

negative correlation (as car age goes up, value goes down)

12. the number of weeks a music album has been out and the total sales

positive correlation (as weeks go up, total sales go up)

13. the number of games downloaded to your Playstation and the amount of memory still available

negative correlation (as number of games downloaded goes up, memory goes down)

14. the amount of time spent on Snapchat and the number of pillows in your house

no correlation (amount of time on snapchat has no effect on number of pillows)

15. the amount of time you study for a test and your grade on that test

positive correlation (as time spent studying goes up, grade goes up)