

Assignment 4.8

Create a scatterplot for each of the given scenario.

1. A teacher asked students to record how many hours of sleep they got the night before their test.

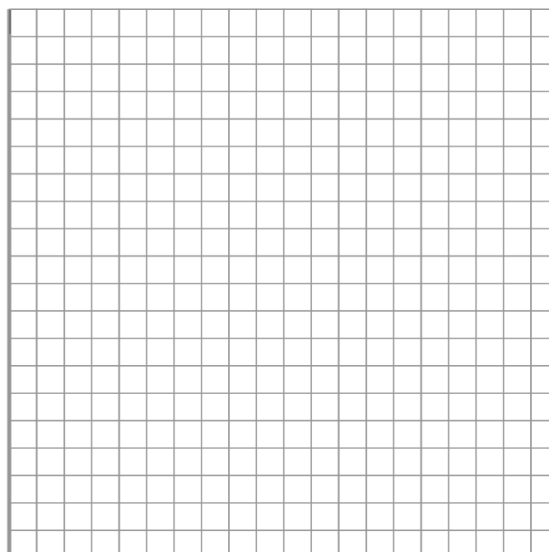
Hours Slept	8	7	7	8	6	5	7	4	9	7
Test Score	83	86	74	88	76	63	90	60	89	81

Find the average point and put it on the graph in a different color.

Average Point (\bar{x}, \bar{y}) :

Draw a line of best fit through the average point and then write the equation for the line.

Equation:



Describe the correlation of the data:

Direction:

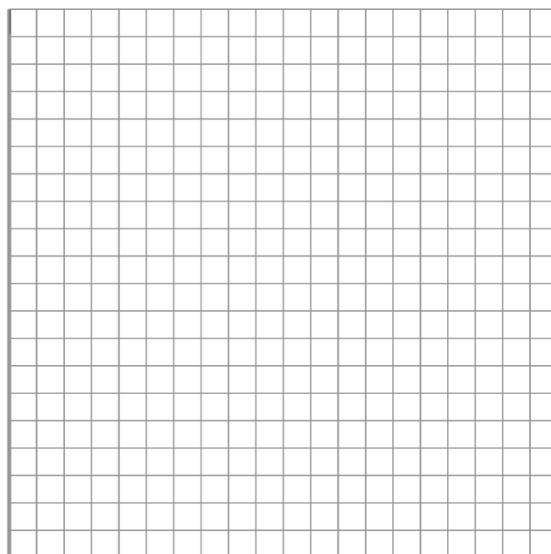
Strength:

Use the equation to predict the score on the test if you slept 11 hours.

Use the equation to predict the score on the test if you slept 2 hours.

2. The number of marriage licenses issued by Clark County Nevada, the county where Las Vegas is located is given in the table below. Make a scatterplot of the given data.

Year	# of licenses
2001	141,000
2006	127,000
2007	121,000
2010	111,000
2011	109,000
2012	104,000



Give the correlation data:

Direction:

Strength:

Average Point (\bar{x}, \bar{y}) :

Draw the linear regression (line of best fit) and write the equation for it:

Use your equation to estimate how many licenses they will issue in 2022.