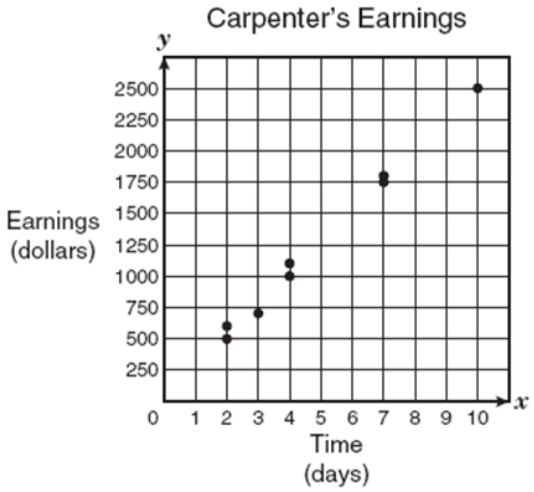
Algebra 1 Name: _____

Version A Block: _____

Scatterplots & Regression Remediation

1. A carpenter recorded the amount of money he earned for different jobs and the amount of time he spent on each job. The data is shown in the scatterplot below:



a. What type of correlation is shown?

A. Strong Positive C. Strong Negative

B. Weak Positive D. Weak Negative

b. Based on the data, how much would you expect the carpenter would earn from a job that took 5 days to complete?

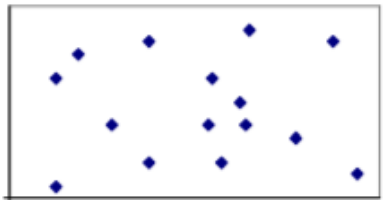
A. $2500 C. $1250

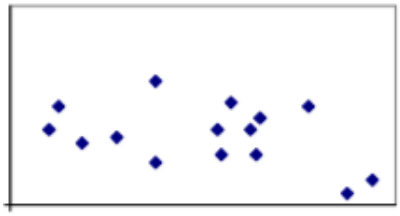
B. $500 D. $200

2. Match the following correlation coefficients with the correct graph.

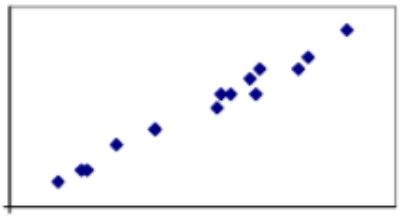
Correlation Coefficient Choices: -0.85 -0.40 0 0.35 0.80 0.99

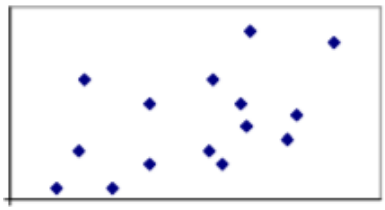
a. _____ b. _____ c. _____

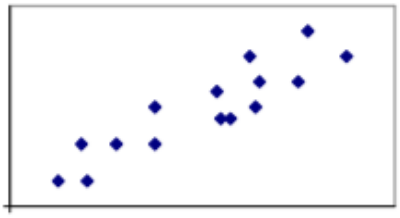




d. _____ e. _____ f. _____







3. Determine if the following is correlation or causation:

a. The height of a basketball player and their jersey number _____

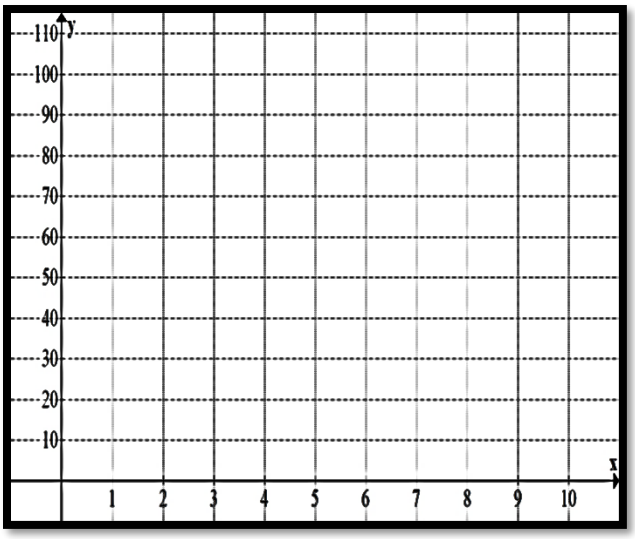
b. The number of tardies and the number of detentions received _____

c. The number of hours worked and how much money you earn _____

d. A child's weight and their vocabulary size _____

4. Create a scatterplot of the following data and answer the following questions:

	Hours Slept	Test Score
Anna	8	95
Bob	7	90
Carly	8	85
Damien	6	75
Esther	5	65
Franco	8	90
Georgia	8	80
Hank	9	95
Innya	7	80
Jacob	6	70



a. Calculate the line of best fit.

b. Explain what the slope means in context of the problem.

c. Explain what the y-intercept means in context of the problem.

d. What is the correlation coefficient (r-value). What does this tell us?