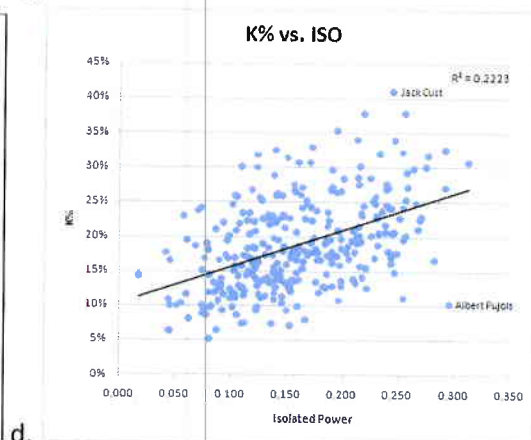
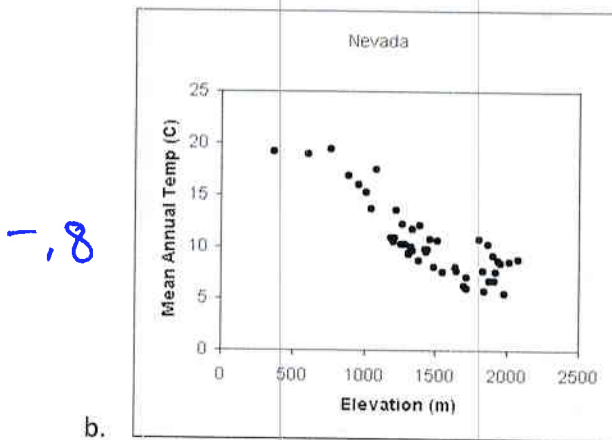
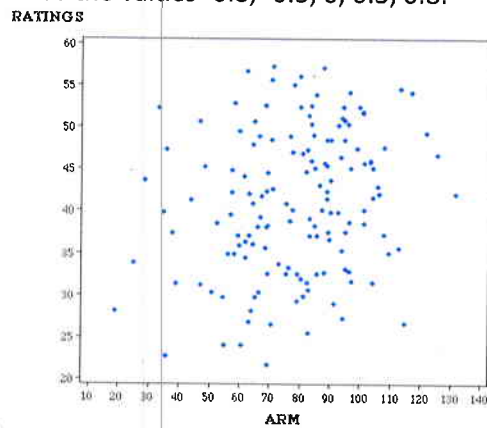
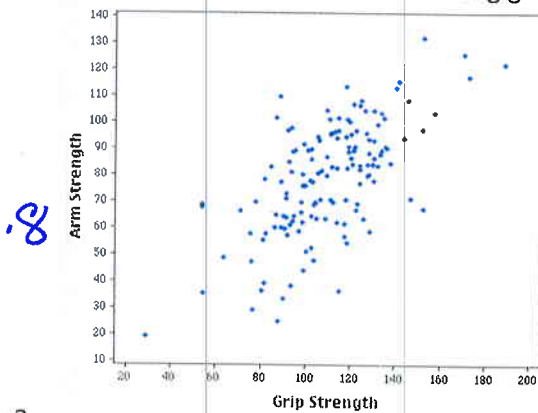


Instructions: Answer each question completely. Show all work for any computational questions.

1. By looking at a scatterplot, how can you tell if the correlation is positive, negative or zero?

if the data goes up to the left and down to the right the correlation is negative; if up to the right then correlation is positive. If there is no trend, its zero.

2. Estimate the correlation of the following graphs. Use the values -0.8, -0.3, 0, 0.3, 0.8.



3. If the correlation of a data set is $r = 0.84$ what proportion of the data can be explained by the relationship between the two variables?

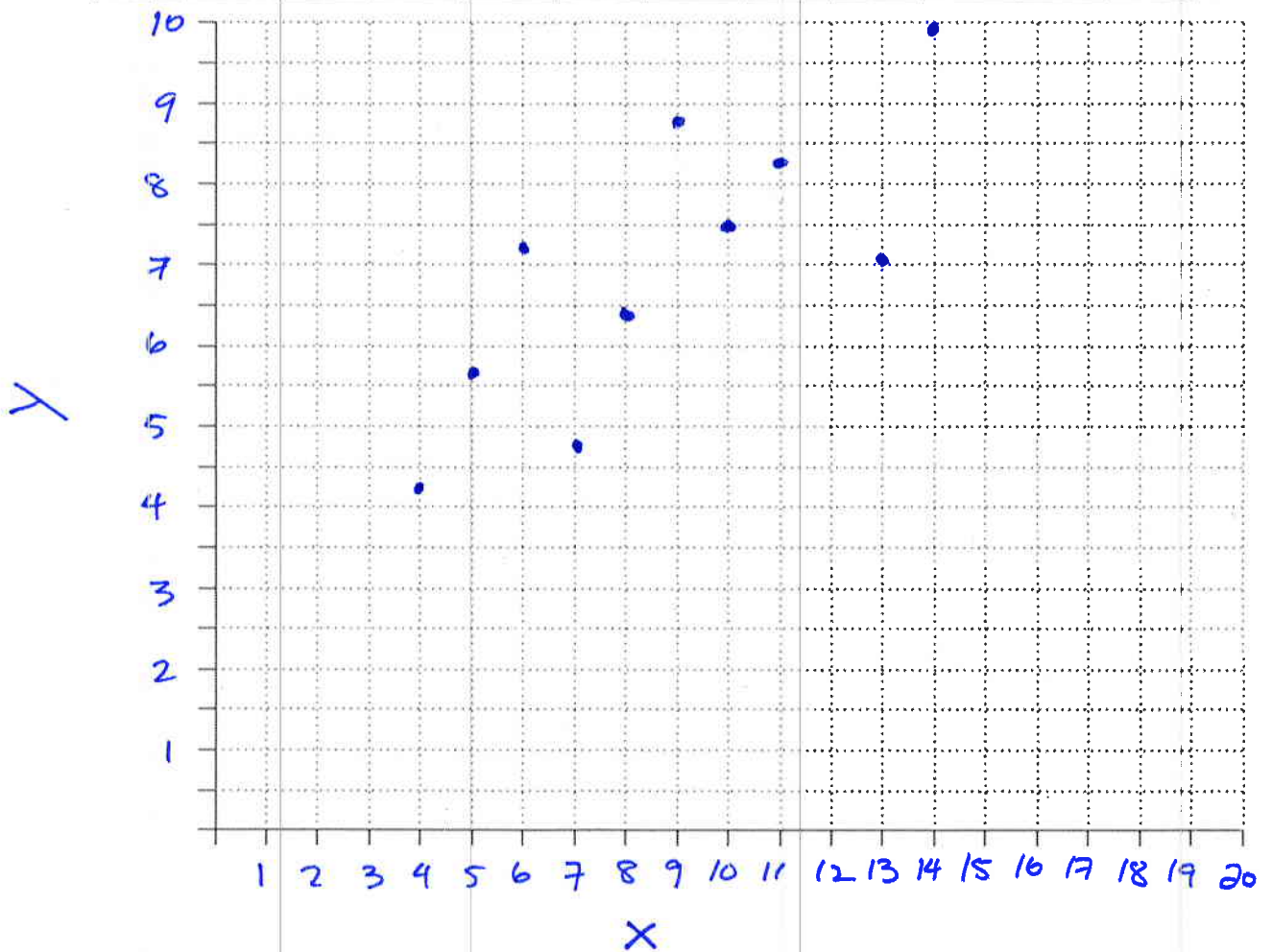
$r^2 = 70.56\%$

4. What do we mean when we say "correlation does not mean causation"?

two variables can be related by a third variable w/o one directly causing the other.

5. Consider the data set below. Plot the data on the graph and label the axes appropriately.

x	10	8	13	9	11	14	6	4	12	7	5
y	8.04	6.95	7.58	8.81	8.33	9.96	7.24	4.26	10.84	4.82	5.68



6. Use your calculator to find the linear regression line for the data. Give the correlation also.

$$y = .536x + 2.582$$

$$r = .83116$$