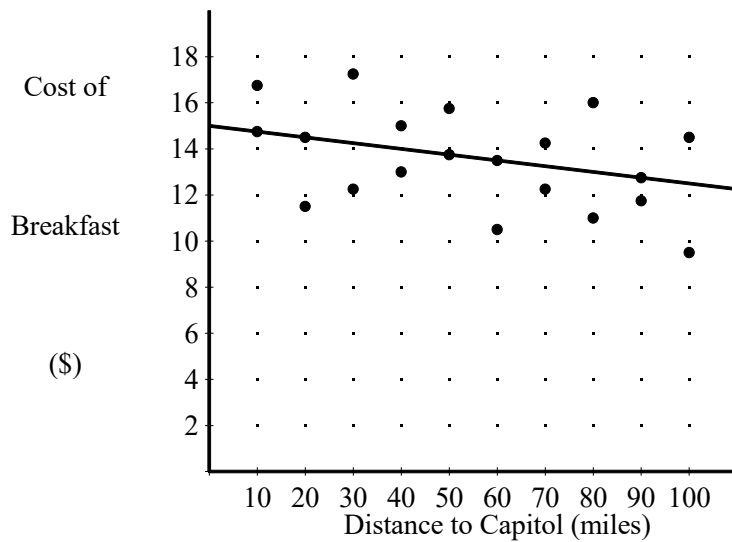NAME:_____

1. Classify the scatter plot below as having *positive*, *negative,* or *no correlation*. If the plot has either positive or negative correlation, determine whether the relationship is strong or weak.

2.

Cost of

Breakfast

($)

Distance to Capitol (miles)

a) Use the trend line to give the cost of breakfast 120 miles from the capitol.
b) Does the pattern of points suggest a moderate or a strong relationship?

NAME:_____

3. Use a graphing calculator to find the equation of the line of best fit for the data below. Tell whether there is a strong correlation between the data.

x	3	7	5	4	6	20	15	12
y	1	8	−1	5	10	18	20	−6

4. Fill in the table below so that the dependent variable, y, shows a weak, negative correlation with the independent variable, x.

x	1	2	3	4	5	6
y	19	?	?	6	?	?

5. Compare the quantities in Column A and Column B.

Column A

the correlation coefficient
for a strong negative correlation

Column B

the correlation coefficient
for a weak positive correlation

[A] The quantity in Column A is greater.   [B] The quantity in Column B is greater.

[C] The quantities are equal.

[D] The relationship cannot be determined from the information given.

[1]   weak, negative

[2]   a. $12 b. moderate

[3] $y = 0.9x - 1.1$; no

      Answers will vary. One or two y-values
[4]