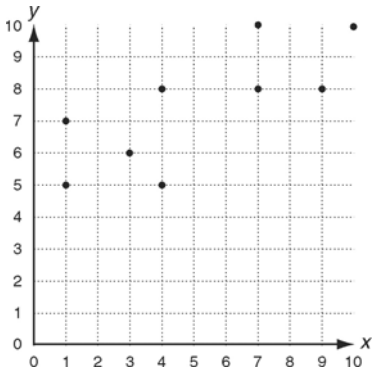
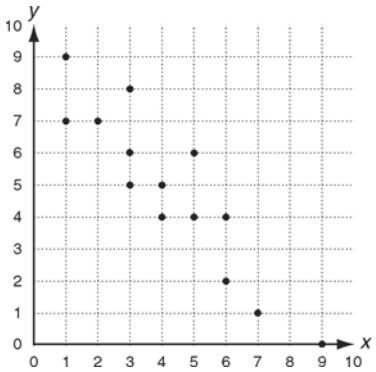
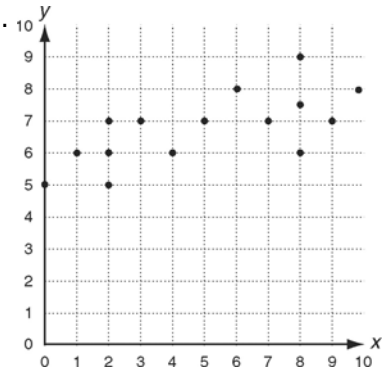
Name_____Per_____ Col_____ HW #_____ Sec. 1-4

Sketch the line of best fit for each scatter plot. Name the type of correlation.

1. 

2. 

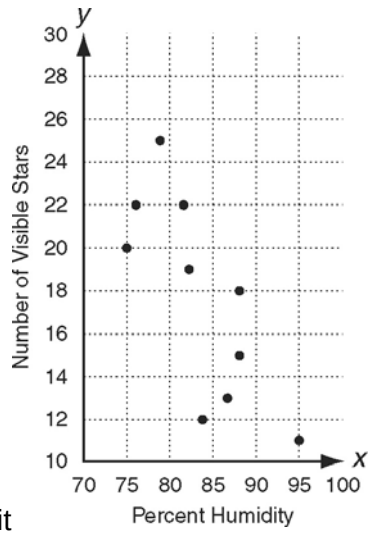
3. 

_____ _____ _____

As a science experiment, Keith recorded the percent humidity and the number of stars he could see at 10:00 P.M. each evening. Use the data in the table for Exercises 4 – 10.

Star Counting Experiment										
Humidity (%)	84	76	79	88	95	82	87	88	75	82
Number of Visible Stars	12	22	25	15	11	19	13	18	20	22

4. Look at the scatter plot of the data using the humidity as the independent variable (x).
5. Sketch a line of best fit that passes through (76, 22) and (95,11).
6. Find the slope of the line using (76, 22) and (95,11).



_____

7. Write the equation of this line.

_____

8. Would you expect the correlation coefficient (r) for the line of best fit to be between −1 and 0 or between 0 and 1? Why?

_____

9. Describe the relationship Keith found between the percent humidity and the number of stars visible.

_____

10. Use your equation to predict the approximate number of stars if the humidity were 50%. How reliable do you think this prediction is? Why?