

## Scatter Plots & Correlation Homework

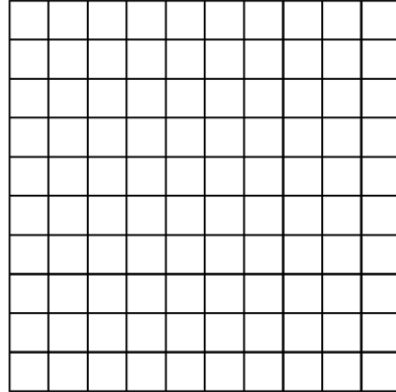
Name: \_\_\_\_\_ Date: \_\_\_\_\_

---

1. Make a scatter plot for each data set. Then find the correlation coefficient using your calculator.

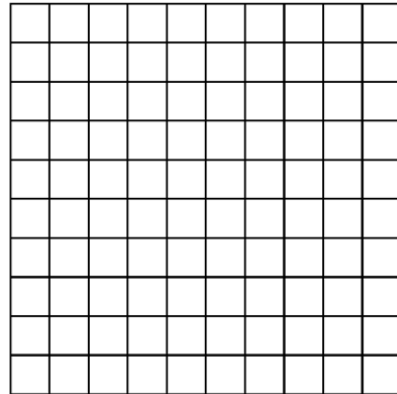
a.

Study Hours	Regents Score
3	80
5	90
2	75
6	80
7	90
1	50
2	65
7	85
1	40
7	100



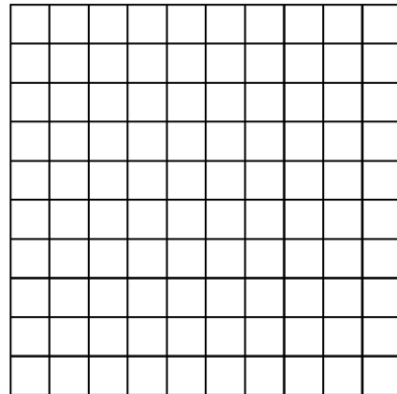
b.

Years	Costs
2000	2.3
2001	3.1
2002	2.6
2003	3.3
2004	4.0
2005	3.9
2006	4.8
2007	5.0
2008	4.7

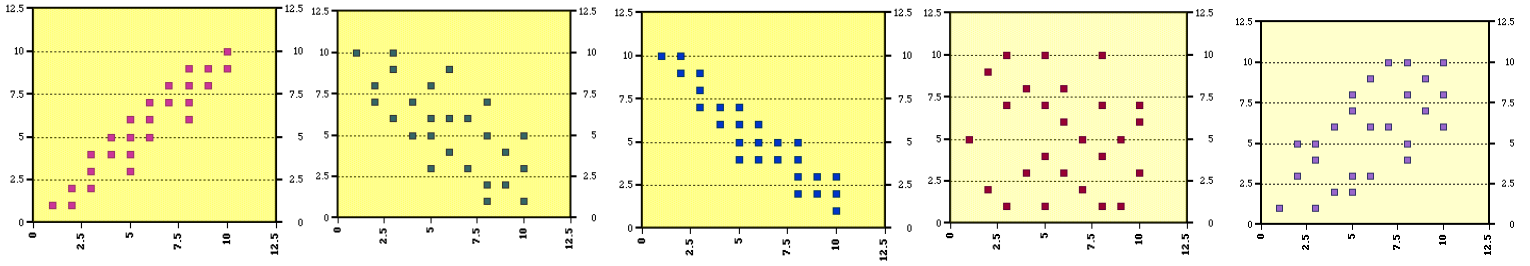


c.

TV Hrs/week	Test Score
30	60
12	80
30	65
20	85
10	10
20	78
15	75
12	95
15	75
11	90
16	90
20	80
19	75



2. Match the correlation coefficient with each scatter plot.



a.  $r = .45$

b.  $r = .94$

c.  $r = .07$

d.  $r = -.39$

e.  $r = -.89$

3. Decide whether each scenario has positive, negative, or no correlation?

- a. Education vs. Income \_\_\_\_\_
- b. Number of Pets a person has vs. Number of books a person has read \_\_\_\_\_
- c. Number of days absent from school vs. Math average \_\_\_\_\_
- d. Test scores vs. Shoe Size \_\_\_\_\_
- e. Distance traveled vs. Amount of gas in the car \_\_\_\_\_
- f. Hours of studying vs. Grades \_\_\_\_\_
- g. Hours in the mall vs. Amount of money spent \_\_\_\_\_
- h. A person's height vs. Person's age \_\_\_\_\_
- i. Person's height vs. How fast they drive \_\_\_\_\_
- j. Temperature vs. Number of people wearing jackets \_\_\_\_\_