

Algebra I

1.6 Worksheet

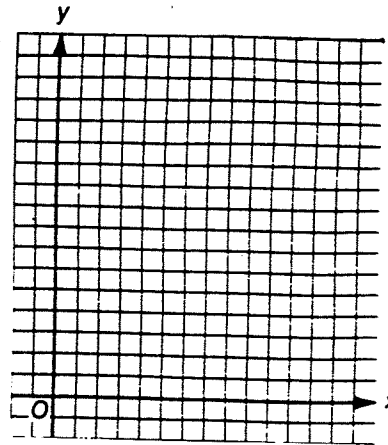
Scatter Plots
Correlation

NAME: _____
DATE: _____ HOUR: _____

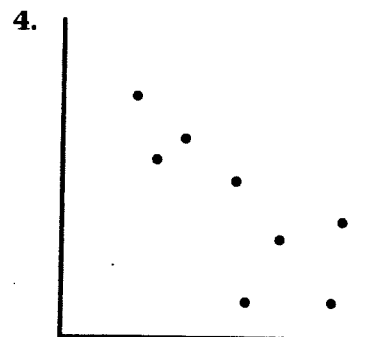
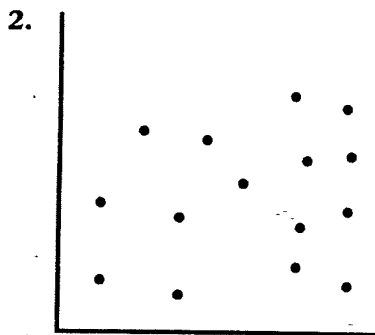
Make a scatter plot for the following set of data.

| | | | | | |
|--------|---|---|----|----|----|
| 1. x | 0 | 2 | 4 | 6 | 8 |
| y | 3 | 6 | 10 | 13 | 17 |

Explain whether there is a positive or negative correlation.



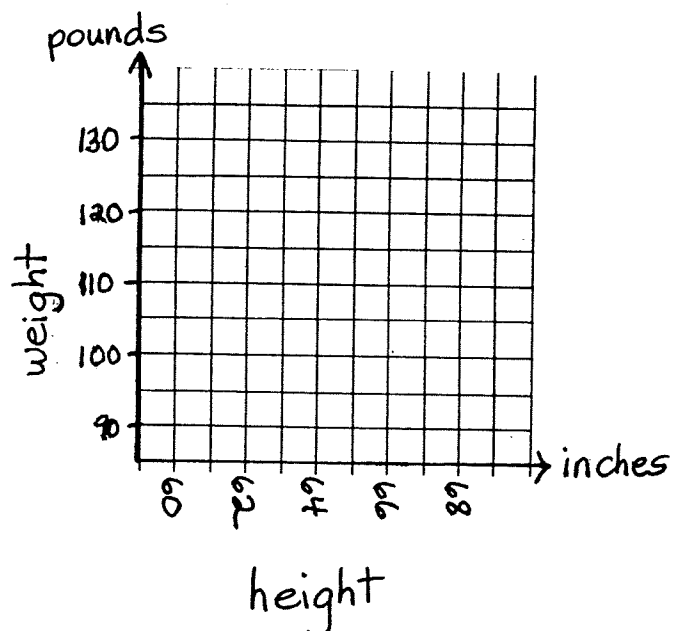
Describe the correlation as positive, negative, or none.



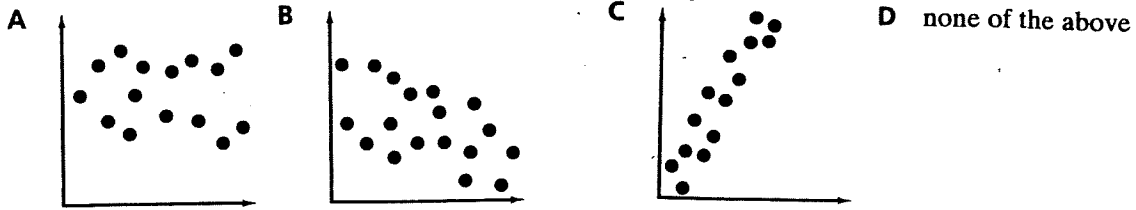
5. Make a scatter plot of the data at the right.
Describe the correlation, if any.

| Name | Height | Weight |
|----------|--------|--------|
| Caleb | 60 in. | 90 lb |
| Ciarra | 63 in. | 99 lb |
| Damon | 67 in. | 125 lb |
| Jennifer | 62 in. | 96 lb |
| Juan | 68 in. | 132 lb |
| Suzette | 65 in. | 116 lb |
| Rodrck | 63 in. | 96 lb |

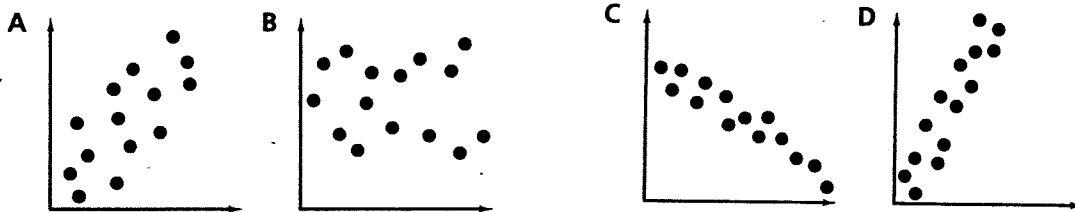
- A strong positive B weak positive
C strong negative D weak negative



6. Which of the following graphs represents a negative correlation?

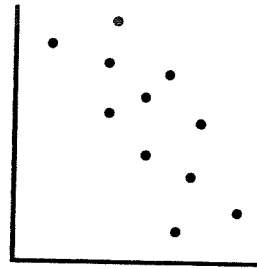


7. Which scatter plot shows a strong positive correlation?



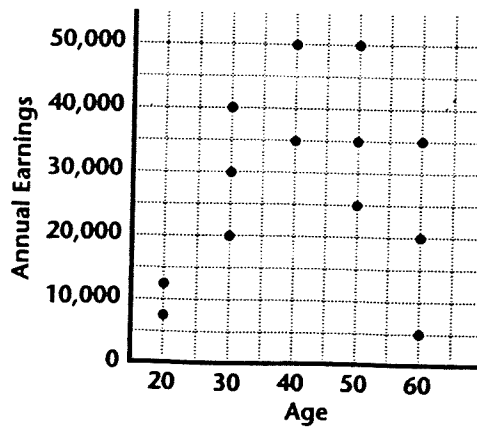
8. How would you describe the data in the scatter plot?

- a. strong correlation
- b. positive correlation
- c. negative correlation
- d. little or no correlation



9. Which statement fits the scatter plot?

- a. There is a positive correlation between age and annual earnings.
- b. As a person gets older, his or her earnings always increase.
- c. As a person gets older, their earnings decrease.
- d. You cannot tell whether there is a correlation between age and annual earnings.



10. Suppose you survey each of your classmates to find the number of hours they sleep each day and watch TV each day. Then you draw a scatter plot of the data where the x -coordinate is hours of TV and the y -coordinate is hours of sleep. You conclude that as the hours of TV increase, the hours of sleep decrease. Which scatter plot shows this relationship?

