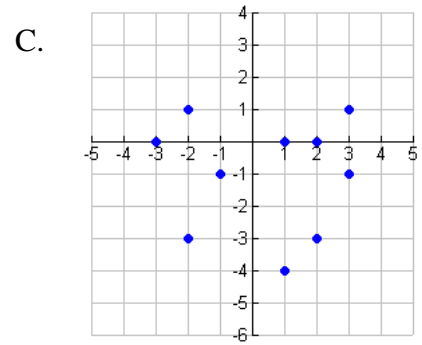
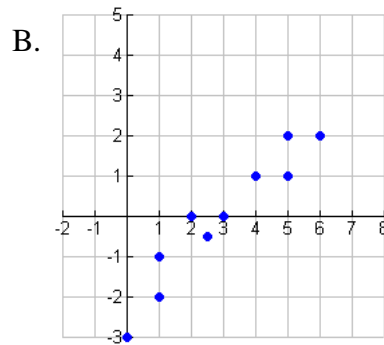
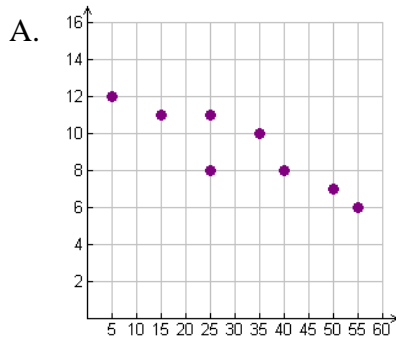


1. What type of association is shown in the scatter plot?



2. Match the following statements to the scatter plot, from problem one.

- F. As the age of a person increases, the time spent in physical activity increases.
- G. There is no relationship between the age of a person and his or her amount of physical activity.
- H. As the age of a person increases, the time spent in physical activity decreases.

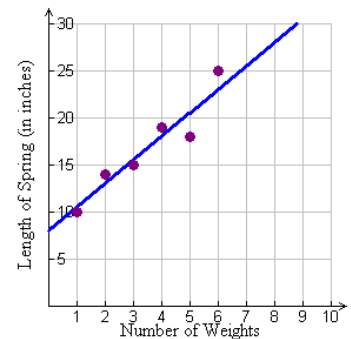
3. In scatter plot 1A, what would be a reasonable estimate for the daily amount of physical activity for a person who is 60 years old?

For Exercises 4 and 5, use the scatter plot shown at the right. The scatter plot shows the length of a metal spring when weights are attached.

4. Which of the following is the most reasonable equation for the line of best fit?

- F. $y = 2.5x + 8$
- G. $y = -2.5x + 8$
- H. $y = -.25x + 9$
- I. $y = .25x + 9$

5. What is a reasonable estimate for the length of a spring when 25 weights are attached?



For Exercises 6 and 7, use the two-way table shown below.

	Likes Metallica	Dislikes Metallica
Plays an instrument	24	15
Does not play an instrument	19	7

6. What is the relative frequency of students that do not play an instrument and like Metallica to the total number of students who do not play an instrument? Round to the nearest hundredth.

7. What is a valid conclusion about the data?

For Exercises 8 and 9, use the following data set.

5, 7, 7, 7, 9, 9, 11, 12, 12, 15, 16, 18

8. What are the first and third quartiles of the data?
9. The standard deviation for the data is 4.16. Write 2 numbers that are within one standard deviation of the mean, and 2 numbers that are not within one standard deviation of the mean.
10. The table given below shows the number of students who attended the Math Club meetings during the school year. To the nearest tenth, what is the mean absolute deviation of the data?

Math Club Attendance		
15	24	19
24	17	21

11. a. What should you use to describe the center, if a data distribution is symmetric?
- b. What should you use to describe the center, if a data distribution is not symmetric?

Use the table on the right for questions 12 and 13.

12. What is the mean absolute deviation?

Age of Class Members			
12	18	21	39
27	11	4	32
24	23	65	18

13. The standard deviation of the ages of class members is 3.7. Describe the ages that are within one standard deviation of the mean age.
14. A teacher surveyed the students in the cafeteria and found that 47 males like baseball while 15 do not like baseball. There were 45 females surveyed and 24 of them dislike baseball.
- a. Complete the two-way table summarizing the data.

- b. Find the relative frequencies of students by columns. Round to the nearest hundredth if necessary. Write the answer in the table.

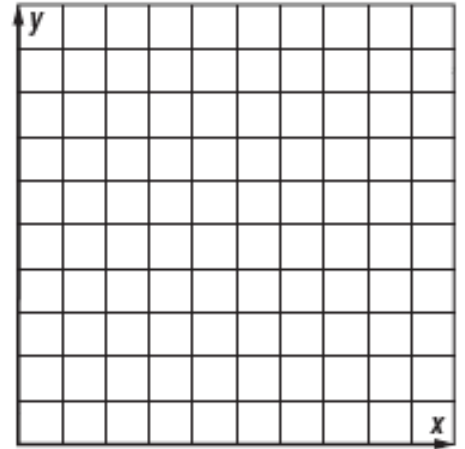
	Likes Baseball	Dislikes Baseball	Total
Male			
Female			
Total			

- c. Interpret the relative frequencies of students by columns.

For Exercises 15 - 19, use the data in the table below. The table shows the membership for a fitness center in the years 2003-2010.

Years Since 2002	1	2	3	4	5	6	7	8
Membership	60	90	135	105	150	120	150	180

- 15. Construct a scatter plot for the data.
- 16. Draw and assess a line that seems to best represent the data on the scatter plot.
- 17. Write an equation in slope-intercept form for the line of best fit that is drawn.



- 18. Interpret the slope and y -intercept of the line of best fit.
- 19. Use your equation from Exercise 17 to make a conjecture about the number of fitness center members in the year 2013.