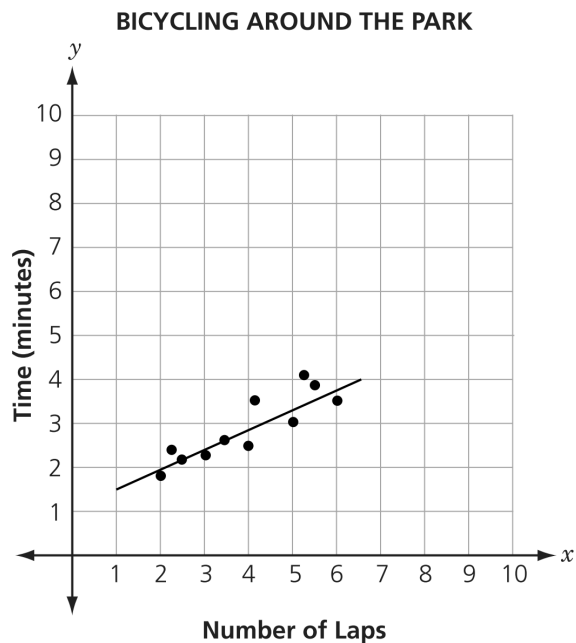


Name: _____

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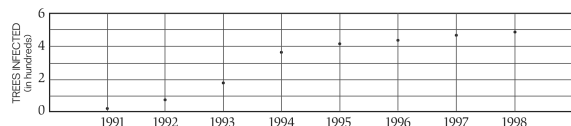
1. A group of friends recorded the time it took to ride their bikes around the park. The scatter plot below shows their results with the line of best fit.



Using the line of best fit, which is *closest* to the number of minutes it would take to complete 9 laps?

- A. 4 B. 5 C. 6 D. 7

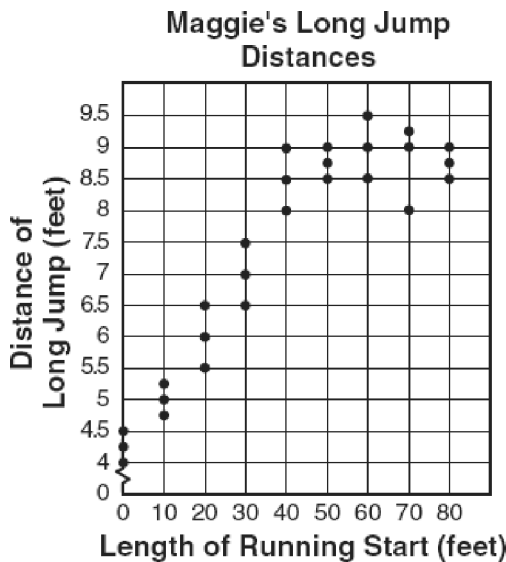
2. A forester studied a 100 square mile area of a spruce forest in Alaska. The graph below shows the total number of trees infected with spruce bark beetle on the first day of each year from 1991 to 1998.



According to the data on the graph, which statement is true?

- A. The greatest increase occurred in 1991?
 B. The smallest increase occurred in 1993?
 C. The increase was consistent throughout the 8 years shown on the graph.
 D. From 1993 to 1995 there was more than a 100% increase in the number of infected trees.

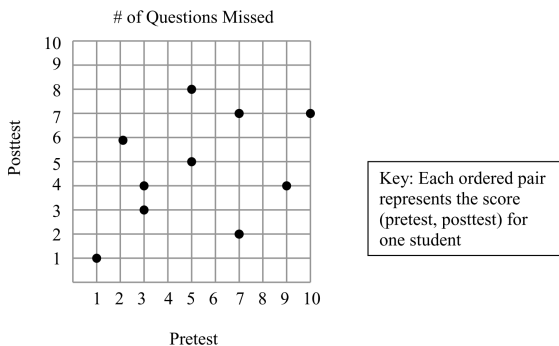
3. Maggie made the scatter plot below to record the distances she jumped with different running start lengths.



Which is the distance of Maggie's longest jump when she had a running start of 20 feet?

- A. 4.5 feet B. 6 feet
 C. 6.5 feet D. 9 feet

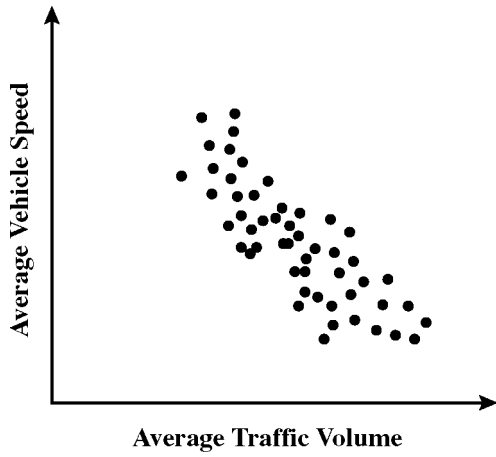
4. Ms Sandy made a scatterplot to compare the number of questions each student missed on their pretest and their posttest, as shown in the graph below.



How many of Ms. Sandy's 10 students missed the same number of questions on both tests?

- A. 2 B. 4 C. 8 D. 10

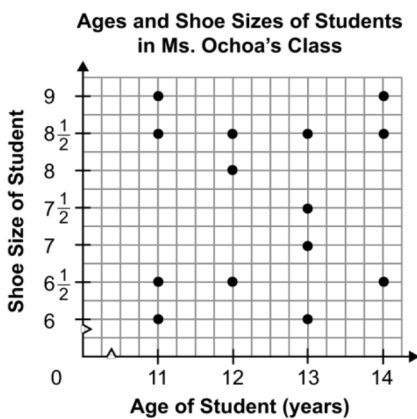
5. The scatter plot below shows the average traffic volume and average vehicle speed on a certain freeway for 50 days in 1999.



Which statement best describes the relationship between average traffic volume and average vehicle speed shown on the scatter plot?

- A. As traffic volume increases, vehicle speed increases.
- B. As traffic volume increases, vehicle speed decreases.
- C. As traffic volume increases, vehicle speed increases at first, then decreases.
- D. As traffic volume increases, vehicle speed decreases at first, then increases.

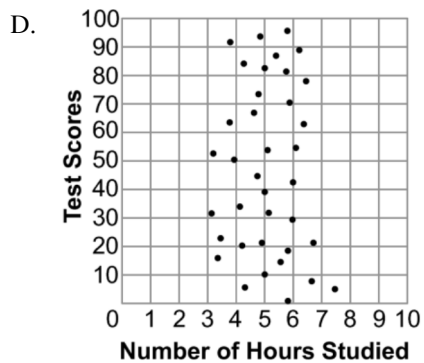
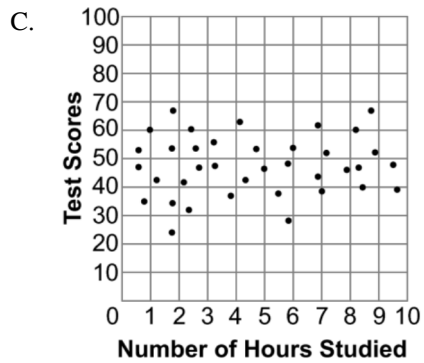
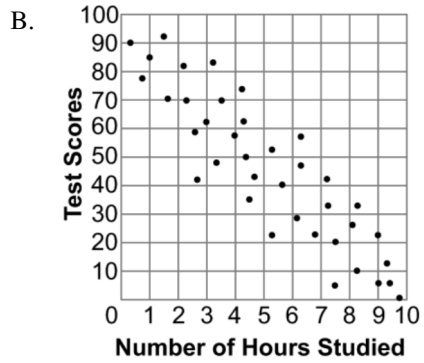
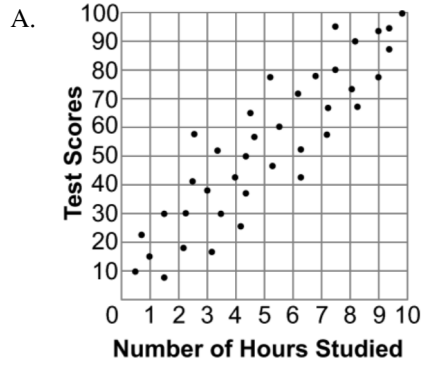
6. Ms. Ochoa recorded the age and shoe size of each student in her physical education class. The graph below shows her data.



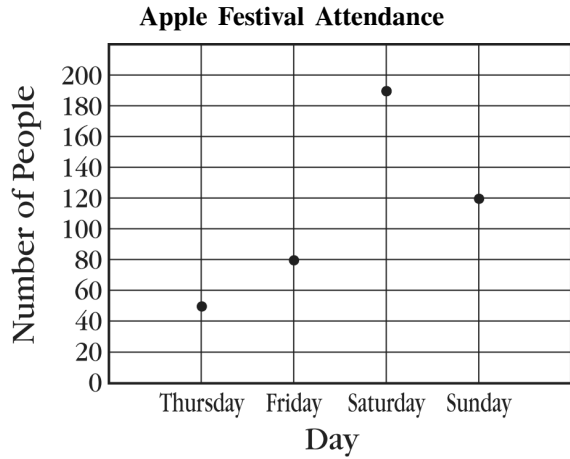
Which of the following statements about the graph is true?

- A. The graph shows a positive trend.
- B. The graph shows a negative trend.
- C. The graph shows a constant trend.
- D. The graph shows no trend.

7. Which graph *best* shows a positive correlation between the number of hours studied and the test scores?



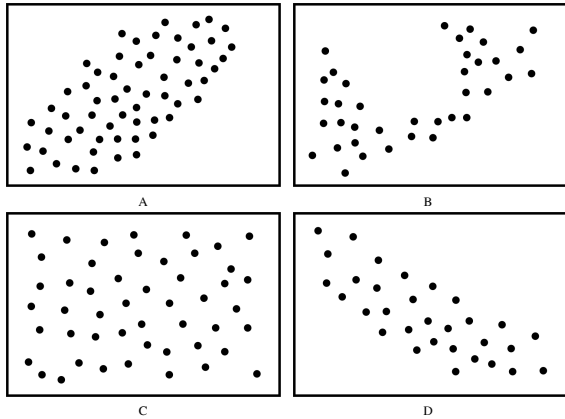
8. Use the graph below to answer the following question.



What is the total number of people that attended the apple festival on Saturday?

- A. 180 B. 190 C. 210 D. 250

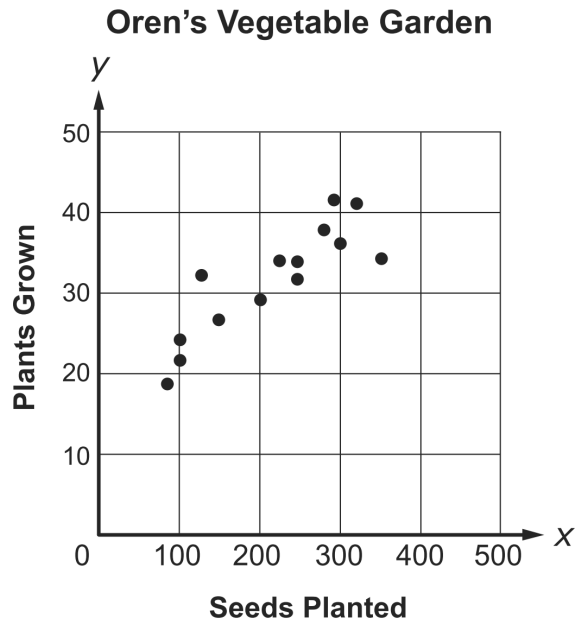
9. Use the scatter plots below to answer the following question.



Which of the scatter plots shown above suggests a strong negative correlation?

- A. A B. B C. C D. D

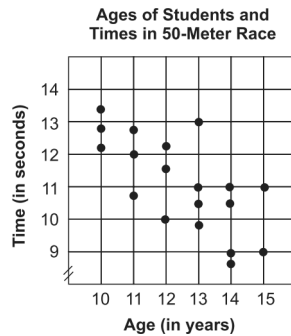
10. Use the scatter plot to answer the question.



Oren plants a new vegetable garden each year for 14 years. This scatter plot shows the relationship between the number of seeds he plants and the number of plants that grow. Which number best represents the slope of the line of *best* fit through the data?

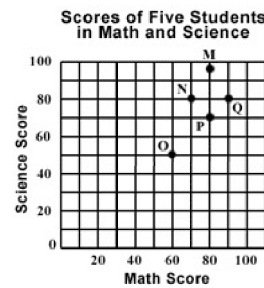
- A. -10 B. $-\frac{1}{10}$ C. $\frac{1}{10}$ D. 10

11. In the scattergram, each dot represents one student who participated in the 50-meter race. Vicki won the race. According to the scattergram, how old is Vicki?



- A. 10 years old B. 13 years old
C. 14 years old D. 15 years old

12. Use the graph to answer the following question(s).



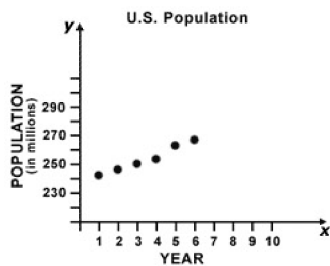
Which student had the greatest difference in mathematics and science scores?

- A. M B. N C. O D. P

13. What is the best estimate of the mean of the science test scores for all five students?

- A. 75 B. 80 C. 85 D. 95

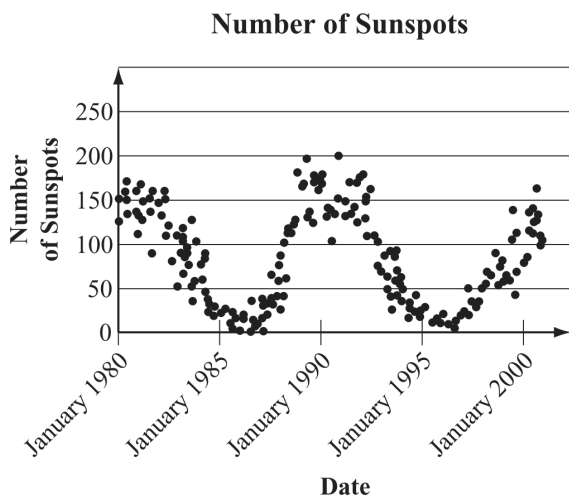
14. Use the graph below to answer the following question



Which equation could describe the line of best fit for the graph above?

- A. $y = 5x + 236$ B. $y = -5x + 236$
 C. $y = \frac{1}{5}x + 236$ D. $y = \frac{-1}{5} + 236$

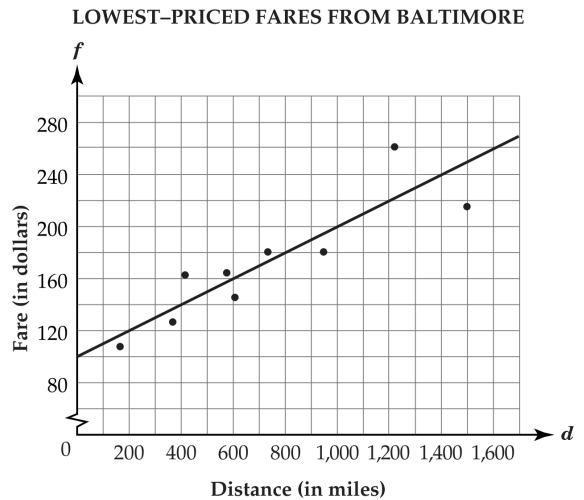
15. A sunspot is a dark area on the surface of the Sun that appears and disappears frequently. The scatterplot below shows the number of sunspots that appeared during each month from January 1980 through December 2000.



Which of the following best represents the range of the number of sunspots for the data shown in the scatterplot?

- A. 50 B. 100 C. 150 D. 200

16. The scatter plot below shows the lowest-priced fares for flights from Baltimore to various destinations. A line of best fit has been graphed.



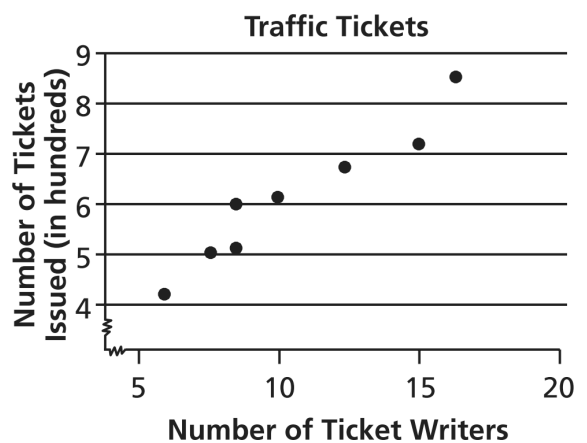
The equation for this line of best fit is shown below, where d is the distance in miles and f is the fare in dollars.

$$f = 0.1d + 100$$

Which of these is a correct interpretation of the slope of this line?

- A. The fare increases \$100 for every additional 0.1 mile.
 B. The fare increases \$10 for every additional mile.
 C. The fare increases \$0.10 for every additional 100 miles.
 D. The fare increases \$0.10 for every additional mile.

17. Use the scatter plot below to answer the following question.



The police department tracked the number of ticket writers and number of tickets issued for the past 8 weeks. The scatter plot shows the results. Based on the scatter plot, which statement is true?

- A. More ticket writers results in fewer tickets issued.
 B. There were 50 tickets issued every week.
 C. When there are 10 ticket writers, there will be 800 tickets issued.
 D. More ticket writers results in more tickets issued.

18.

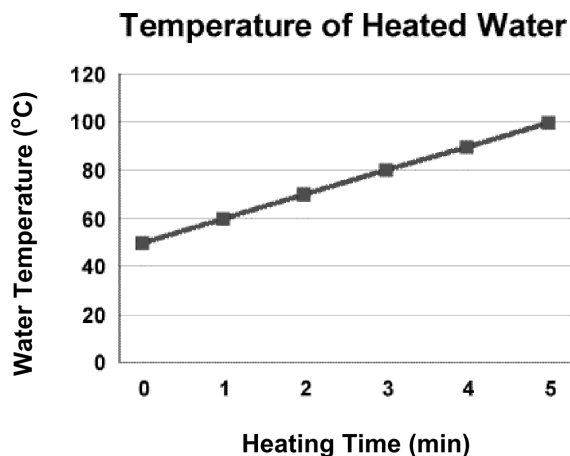
Hours of Sleep and Grade Point Average (G.P.A.)

Student	Hours of Sleep per Night	G.P.A.
Alberto	7.2	3.5
Bao	4.3	2.1
Chris	5.5	2.6
Kim	5.1	2.5
Mona	6.2	3.0
Sandy	7.2	3.6
Yang	7.0	3.4

Which of the following statements is supported by the data?

- A. More sleep causes a person to have a higher G.P.A.
- B. A higher G.P.A. allows a person to get more sleep.
- C. In the sample study, sleep and G.P.A. are positively correlated.
- D. Schoolwide, sleep and G.P.A. are positively correlated.

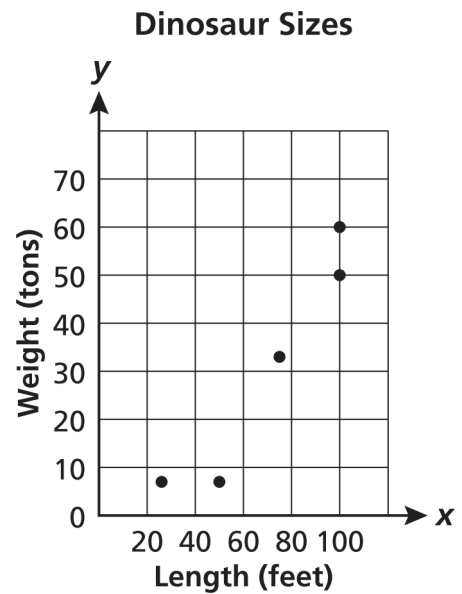
19. A fifth grade class conducted a 5-minute experiment that involved heating time and water temperature. The results of the experiment are represented in the line graph below.



What prediction can be made based on the information gathered?

- A. The water temperature remains the same as the heating time continues.
- B. The water temperature decreases as the heating time continues.
- C. A pattern cannot be determined between these measurements.
- D. The water temperature increases as the heating time continues.

20. The following scatter plot shows the weights and lengths of some dinosaurs.



Which statement accurately describes the information in the scatter plot?

- A. The information shows a positive correlation. The weight of a dinosaur tends to increase according to its length.
- B. The information shows a negative correlation. The weight of a dinosaur tends to decrease according to its length.
- C. The information shows no correlation. The weight and length vary according to the type of dinosaur.
- D. The information shows no correlation. The relationship between the weight and length of a dinosaur is uncertain.

Scatter Plot Quiz 09/29/2013

1.
Answer: B
2.
Answer: D
3.
Answer: C
4.
Answer: B
5.
Answer: B
6.
Answer: D
7.
Answer: A
8.
Answer: B
9.
Answer: D
10.
Answer: C
11.
Answer: C
12.
Answer: A
13.
Answer: A
14.
Answer: A
15.
Answer: D
16.
Answer: D
17.
Answer: D
18.
Answer: C
19.
Answer: D
20.
Answer: A