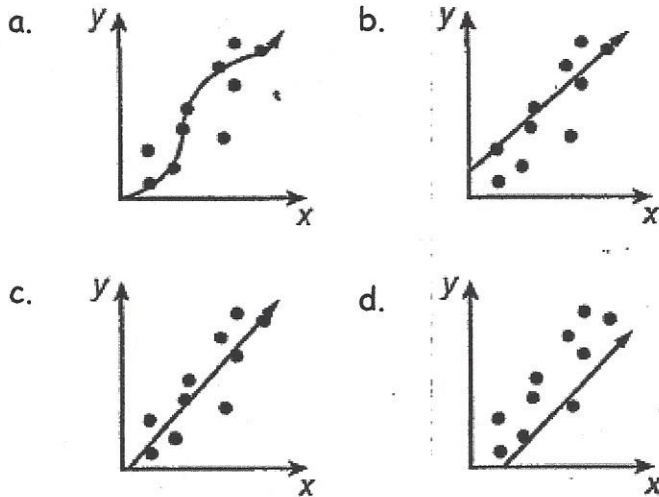
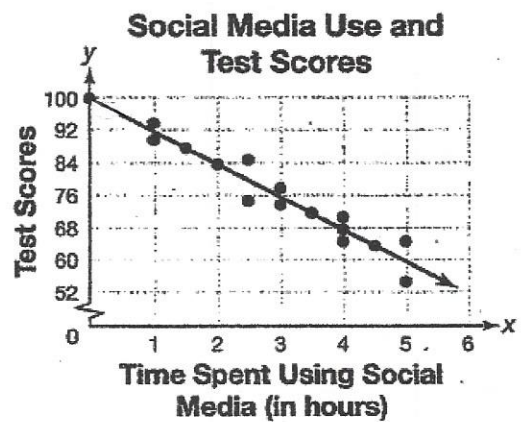


Extra Review for Statistics Quiz

1. Which scatter plot shows the best line of fit?



3. The scatter plot shows the numbers of hours that students spent using social media the night before a test, and their test scores. The data is modeled by the function, $y = -8x + 100$. Which is the best interpretation of the y-intercept of this model?



- a. The use of social media the night before a test does not affect the student's score.
- b. Students who use social media for 8 hours the night before are most likely to score 100.
- c. Students who use social media for 0 hours the night before are most likely to score 100.
- d. Using social media for 100 hours the night before lowers a student's score by 0 points.

2. What is the set of data that involves two variables called?

- a. Scatter plot data
- b. Bivariate data
- c. Negative association data
- d. Positive association data

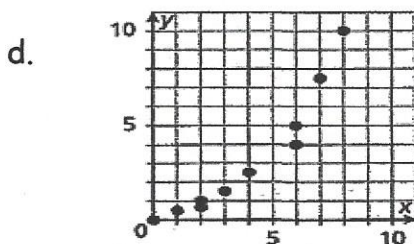
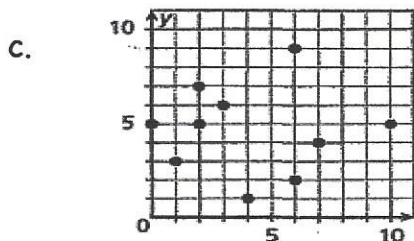
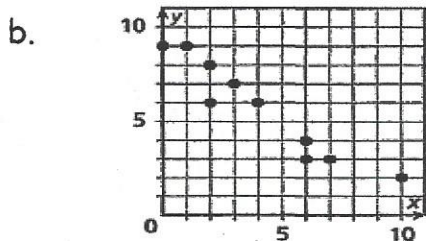
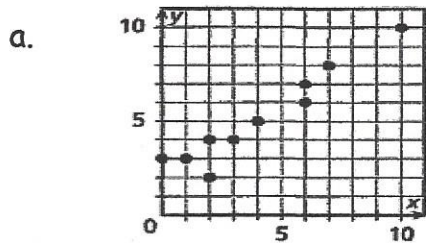
4. Using the scatter plot from question 3, if you were to predict a students' test score that spends 4.5 hours on social media, this would represent

- a. Extrapolating information
- b. Interpolating information

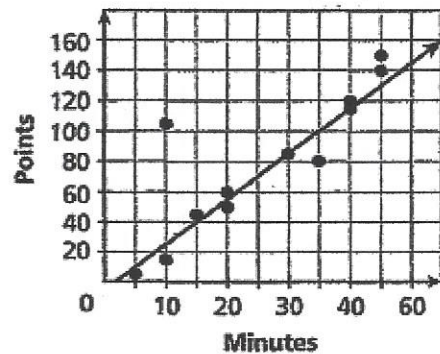
5. For which type of association will a trend line not be very accurate?

- a. Linear association
- b. Non-linear association
- c. Positive linear association
- d. Negative linear association

6. Which graph shows a negative association?



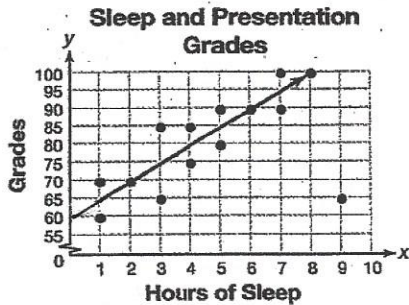
7. Rebecca played several games of cards with her brother. She made a scatter plot showing how many minutes each game lasted and how many points she scored during that game.



Using the trend line, how many points can Rebecca expect to score if the game lasts 25 minutes?

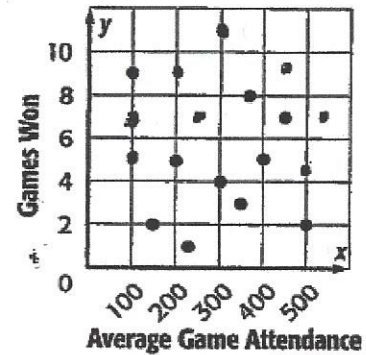
- a. 25
- b. 45
- c. 70
- d. 100

8. This scatter plot shows the numbers of hours of sleep 14 students got the night before a class presentation and their grades for the assignment.

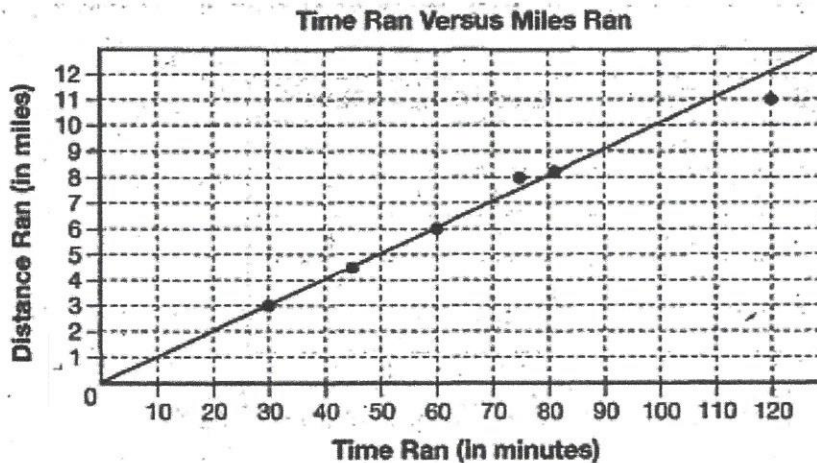


What are the coordinates of the outlier?

9. What type of association does the following scatter plot have?



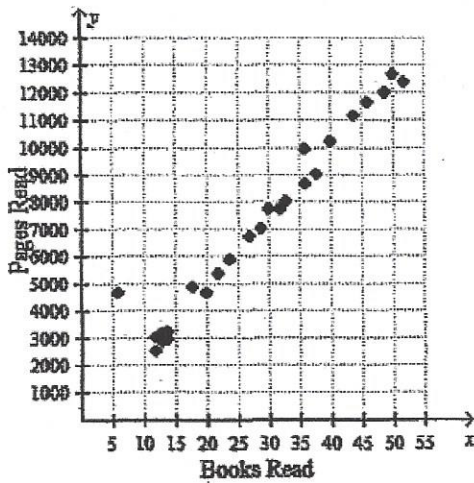
10. Ingrid is preparing for a half marathon by running different numbers of miles in the weeks before the race. The following scatter plot shows the number of miles that Ingrid ran and her time in 8 runs before the half marathon.



Ingrid does one more run before the half marathon. She runs for a total of 90 minutes. About how many miles will she run during this time?

Answer: _____

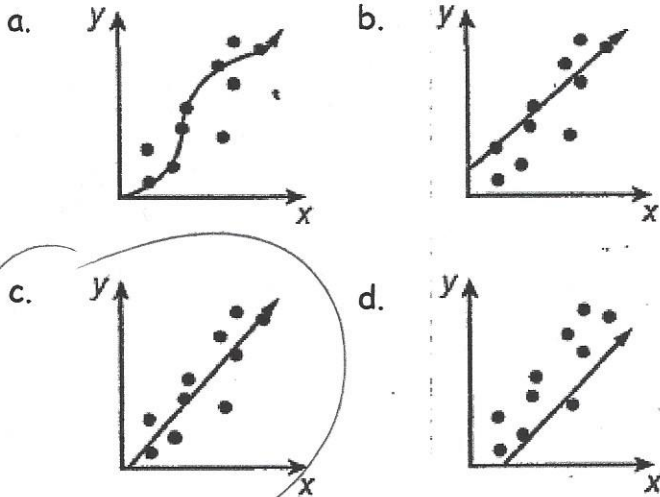
11. A book club has 25 members. The scatter plot compares the number of books read to the total number of pages read for each club member. Tell whether the scatter plot appears to have a linear or non-linear pattern of association. Describe any clustering and identify outliers.



- a. The pattern of association appears to be linear. There appears to be clustering of the data points between 12 and 14 books. After that, the results become less clustered. The point near (6, 4,800) appears to be an outlier.
- b. The pattern of association appears to be linear. There appears to be clustering of the data points between 40 and 50 books. After that, the results become less clustered. There does not appear to be any outliers.
- c. The pattern of association appears to be non-linear. There appears to be clustering of the data points between 12 and 14 books. After that, the results become less clustered. The point near (6, 4,800) appears to be an outlier.
- d. The pattern of association appears to be non-linear. There appears to be clustering of the data points between 12 and 14 books. After that, the results become less clustered. There does not appear to be any outliers.

Extra Review for Statistics Quiz

1. Which scatter plot shows the best line of fit?



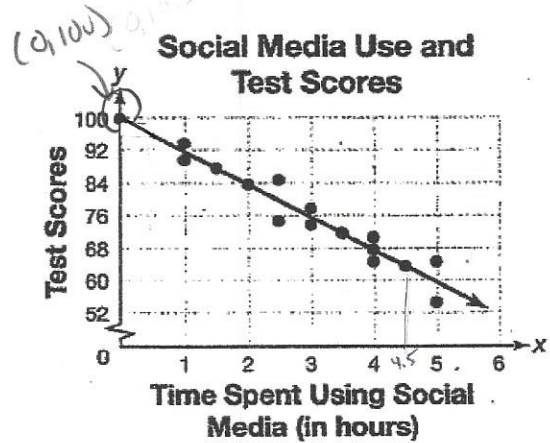
The line must be drawn in the middle of the dots

2. What is the set of data that involves two variables called?

- a. Scatter plot data
- b. Bivariate data
- c. Negative association data
- d. Positive association data

"Bi" means two

3. The scatter plot shows the numbers of hours that students spent using social media the night before a test, and their test scores. The data is modeled by the function, $y = -8x + 100$. Which is the best interpretation of the y-intercept of this model?



- a. The use of social media the night before a test does not affect the student's score.
- b. Students who use social media for 8 hours the night before are most likely to score 100.
- c. Students who use social media for 0 hours the night before are most likely to score 100.
- d. Using social media for 100 hours the night before lowers a student's score by 0 points.

4. Using the scatter plot from question 3, if you were to predict a student's test score that spends 4.5 hours on social media, this would represent

- a. Extrapolating information
- b. Interpolating information

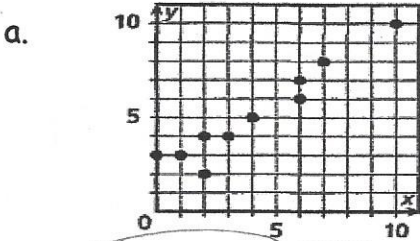
A inside the plotted values. Can use the line to get your answer.

5. For which type of association will a trend line not be very accurate?

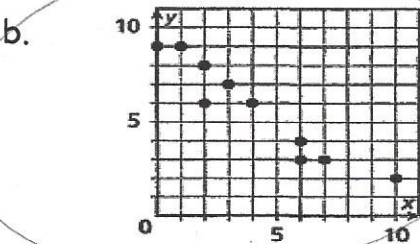
- a. Linear association
- b. Non-linear association
- c. Positive linear association
- d. Negative linear association

must be linear

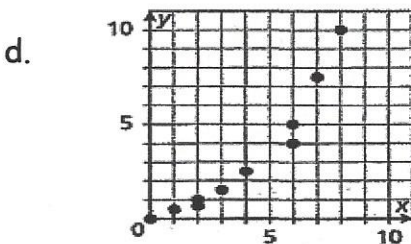
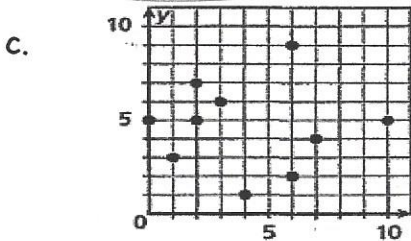
6. Which graph shows a negative association?



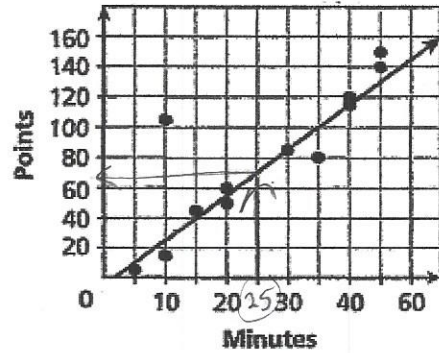
Correlational relationship



look like Negative slope



7. Rebecca played several games of cards with her brother. She made a scatter plot showing how many minutes each game lasted and how many points she scored during that game.

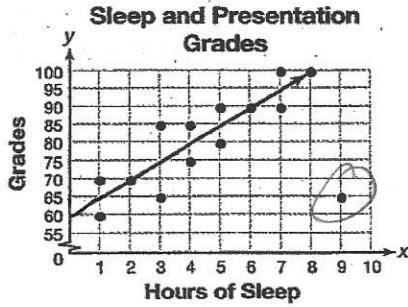


Using the trend line, how many points can Rebecca expect to score if the game lasts 25 minutes?

- a. 25
- b. 45
- c. 70
- d. 100

Line of best fit
Interpolating (inside plotted values) (can use graph)

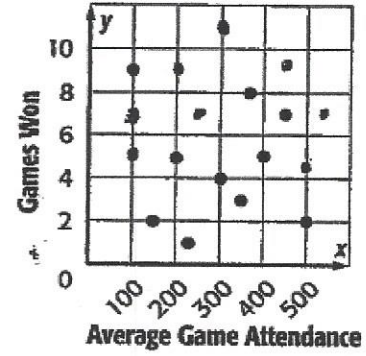
8. This scatter plot shows the numbers of hours of sleep 14 students got the night before a class presentation and their grades for the assignment.



What are the coordinates of the outlier?

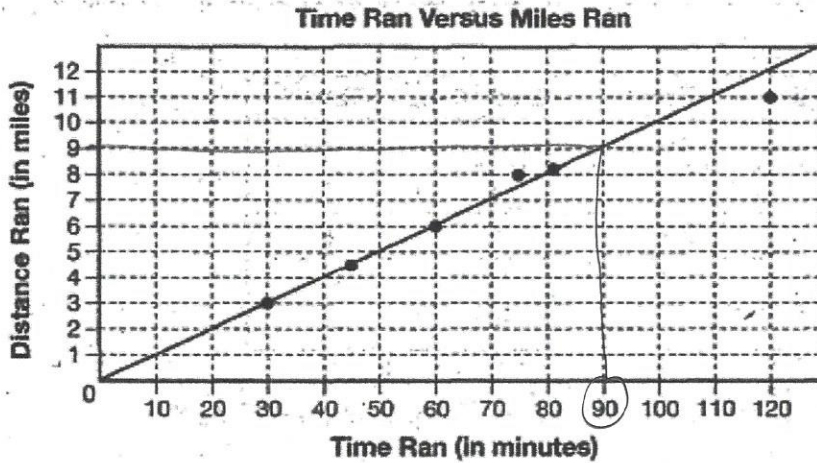
(9, 65) not near the other points

9. What type of association does the following scatter plot have?



NO association

10. Ingrid is preparing for a half marathon by running different numbers of miles in the weeks before the race. The following scatter plot shows the number of miles that Ingrid ran and her time in 8 runs before the half marathon.



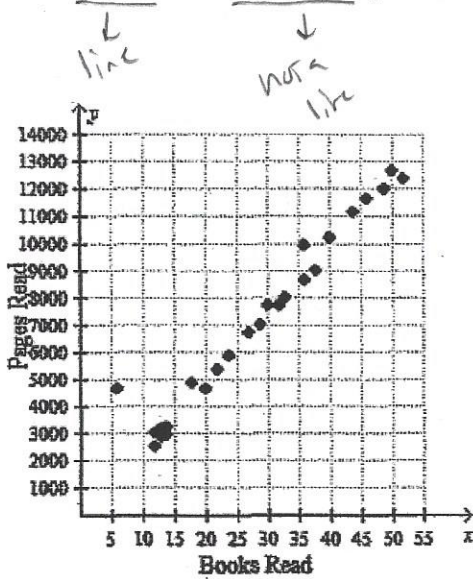
Ingrid does one more run before the half marathon. She runs for a total of 90 minutes. About how many miles will she run during this time?

9 miles

Answer: _____

interpolating inside plotted values can use L&BF

11. A book club has 25 members. The scatter plot compares the number of books read to the total number of pages read for each club member. Tell whether the scatter plot appears to have a linear or non-linear pattern of association. Describe any clustering and identify outliers.



- a. The pattern of association appears to be linear. There appears to be clustering of the data points between 12 and 14 books. After that, the results become less clustered. The point near (6, 4,800) appears to be an outlier.
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