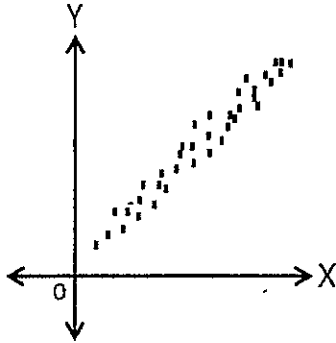
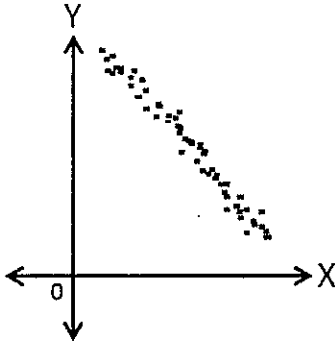


Review: Statistics Quiz

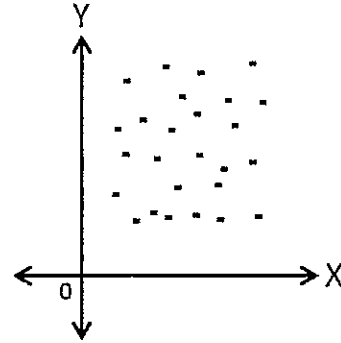
1. Identify the type of association for each scatter plot below.



a. _____

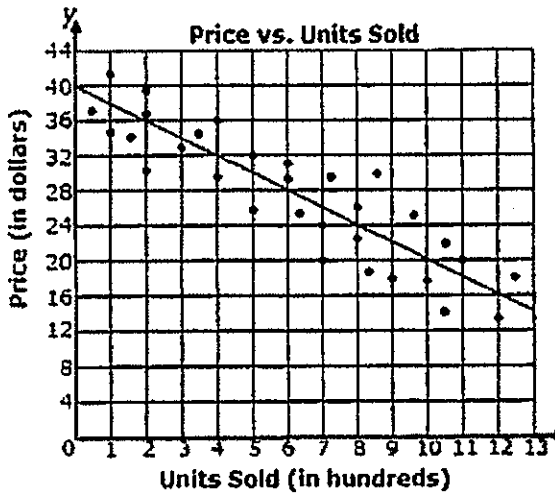


b. _____



c. _____

2. The scatterplot shows how the cost of a single unit of a product relates to the number of units of that product that are sold.

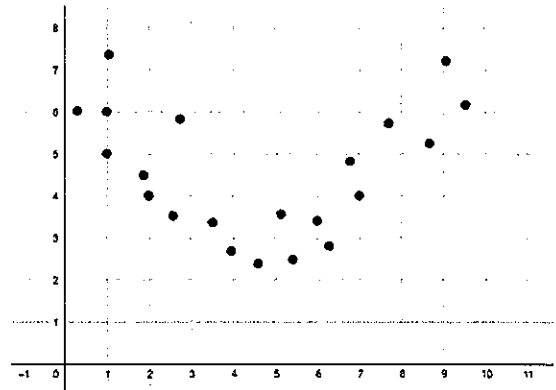


Using the trend line, how much would it cost to sell 600 units of the product?

Answer: _____ \$

3. The set of data that involves two variables is known as _____.

4. Would a trend line be accurate for the data below? Why or why not?



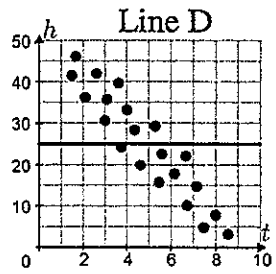
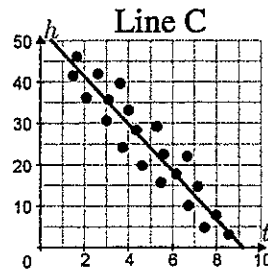
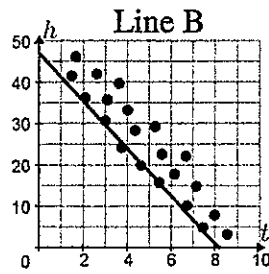
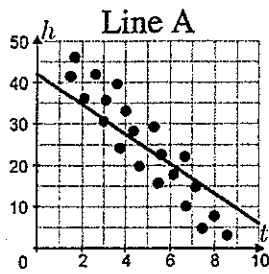
Answer: Yes / No

Explain: _____

5. Another name for the line of best fit is a _____.

_____.

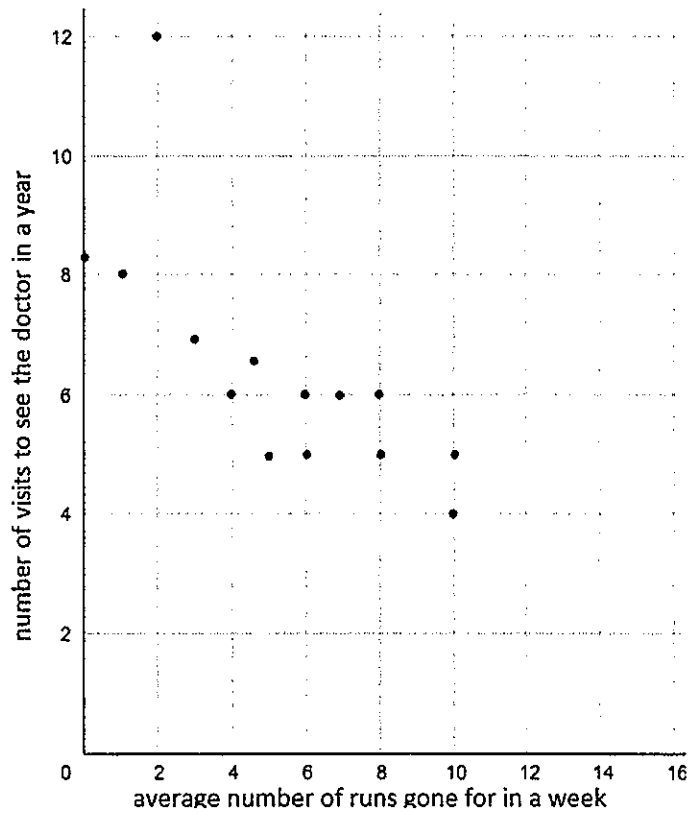
6. Which scatter plot shows the best line of fit?



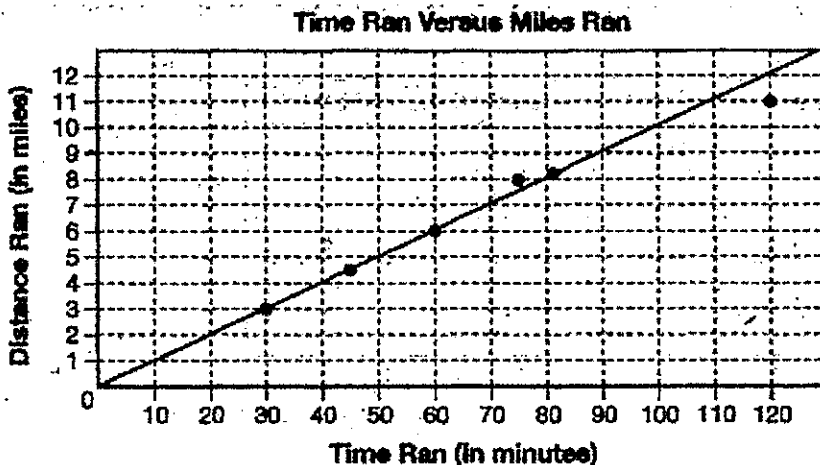
7. This scatter plot shows the number of times a person has gone running in a week and the number of times they visited the doctor that year.

What are the coordinates of the outlier?

Answer: _____



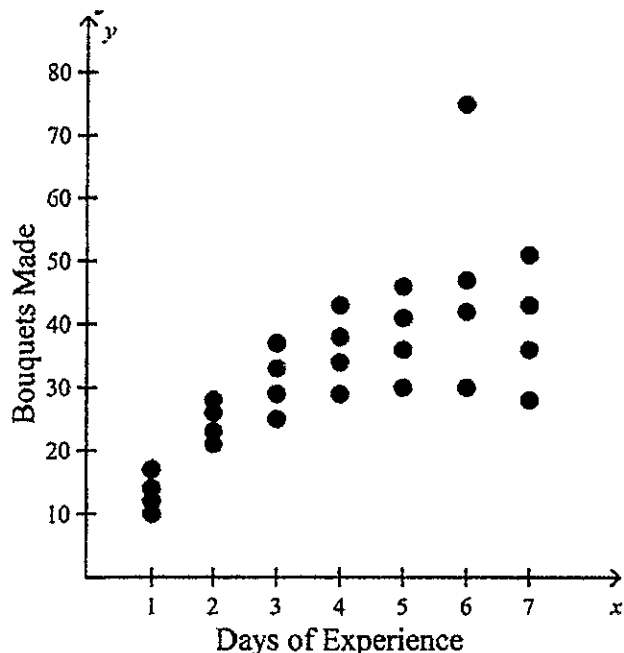
8. Ingrid is preparing for a half marathon by running different numbers of miles in the weeks before the race. The following scatter plot shows the number of miles that Ingrid ran and her time in 8 runs before the half marathon.



Ingrid does one more run before the half marathon. She runs for a total of 70 minutes. About how many miles will she run during this time?

Answer: _____

9. A floral delivery company conducts a study to measure the effect of worker experience on productivity. Tell whether the scatter plot appears to have a linear or non-linear pattern of association. Describe any clustering and identify any outliers.



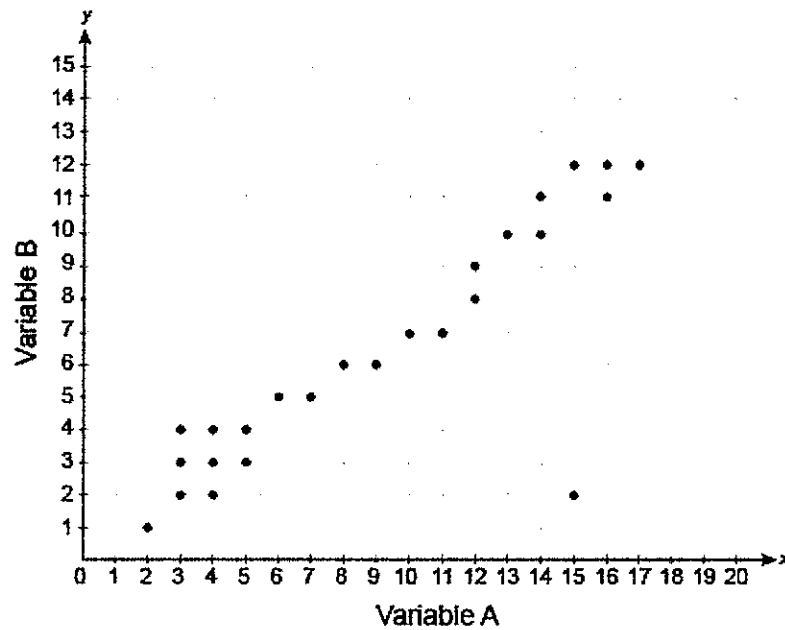
a. The pattern of association appears to be linear. There appears to be clustering of the data points at 1 and 2 days. After that, the results become less clustered. There do not appear to be any outliers.

b. The pattern of association appears to be non-linear. There appears to be clustering of the data points at 6 and 7 days. Before that, the results are less clustered. There do 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 at 1 and 2 days. After that, the results become less clustered. The point near (6, 75) appears to be an outlier.

d. The pattern of association appears to be linear. There appears to be clustering of the data points at 1 and 2 days. After that, the results become less clustered. The point near (6, 75) appears to be an outlier.

10. Use the graph to answer the following questions.



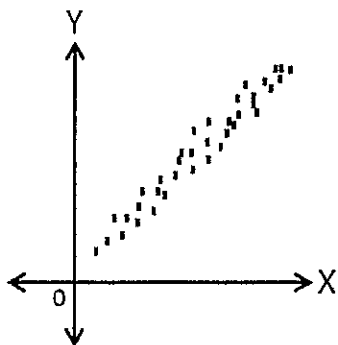
Part A: What type of correlation is represented by the graph? _____

Part B: When $x = 10$, what is the expected y -value? _____

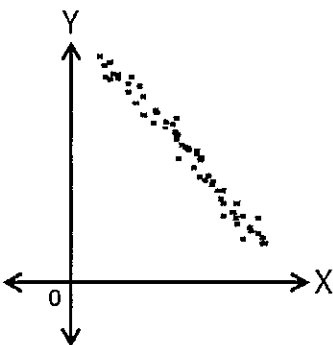
Part C: Identify the outlier by stating its coordinates. (_____ , _____)

Review: Statistics Quiz

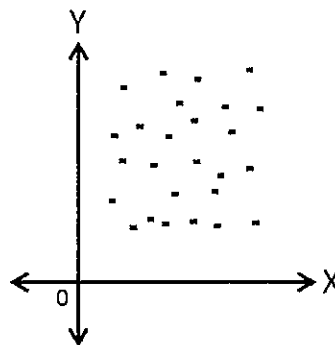
1. Identify the type of association for each scatter plot below.



a. Positive

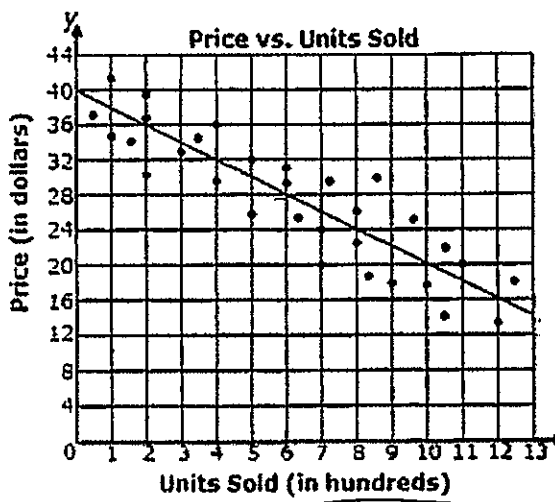


b. Negative



c. NO correlation

2. The scatterplot shows how the cost of a single unit of a product relates to the number of units of that product that are sold.

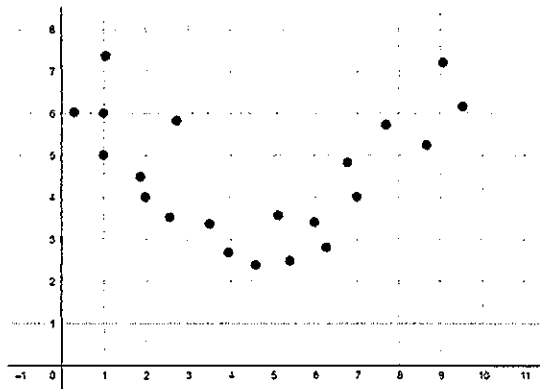


Using the trend line, how much would it cost to sell 600 units of the product?

Answer: 28 \$

3. The set of data that involves two variables is known as Bivariate Data.

4. Would a trend line be accurate for the data below? Why or why not?

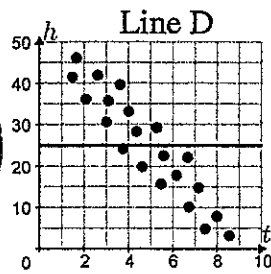
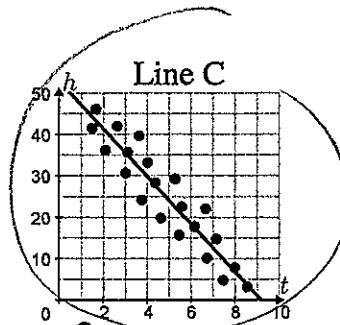
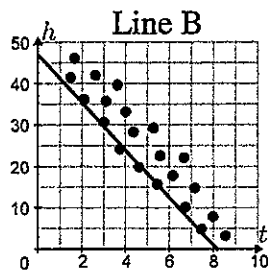
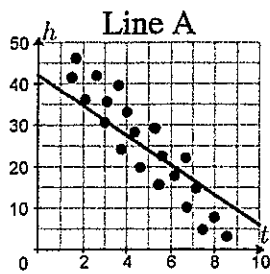


Answer: Yes / No

Explain: bc it has a non-linear association

5. Another name for the line of best fit is a Trend line.

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



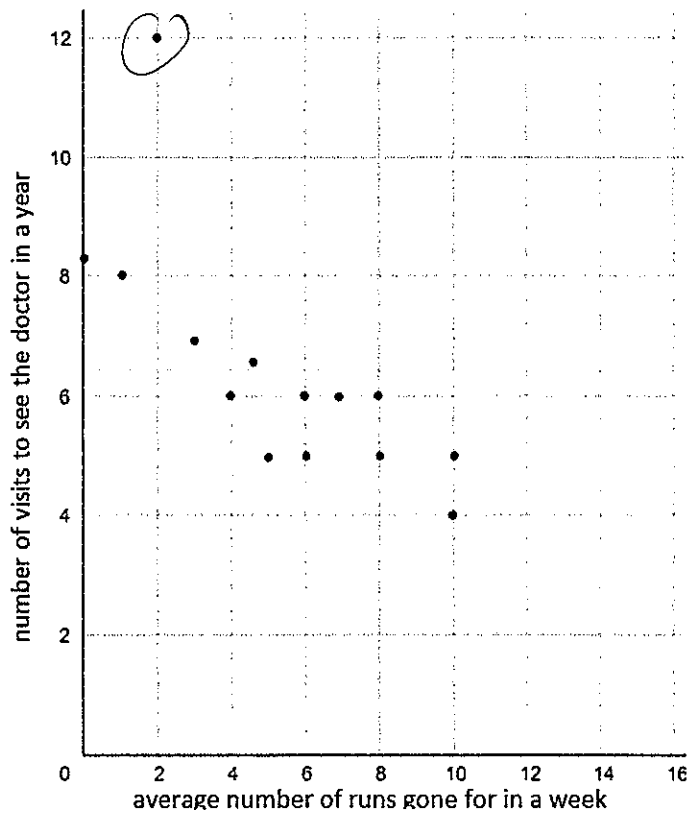
B/C the line is in the middle of the dots

7. This scatter plot shows the number of times a person has gone running in a week and the number of times they visited the doctor that year.

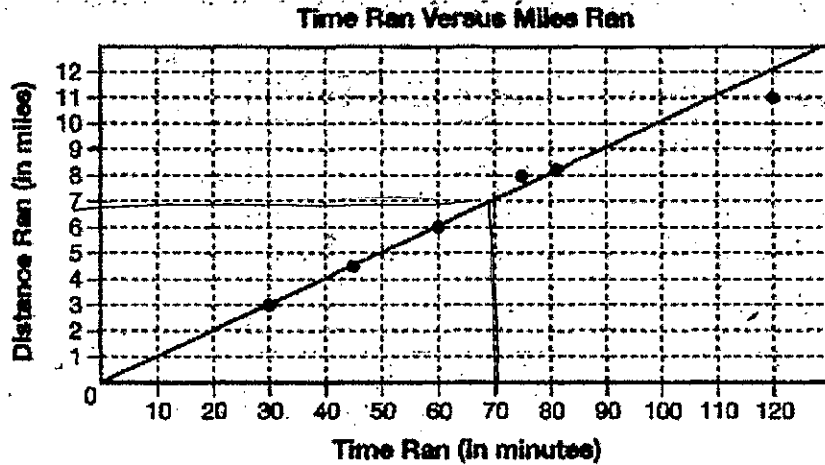
What are the coordinates of the outlier?

Answer: (2, 12)

dot not near the other plotted values



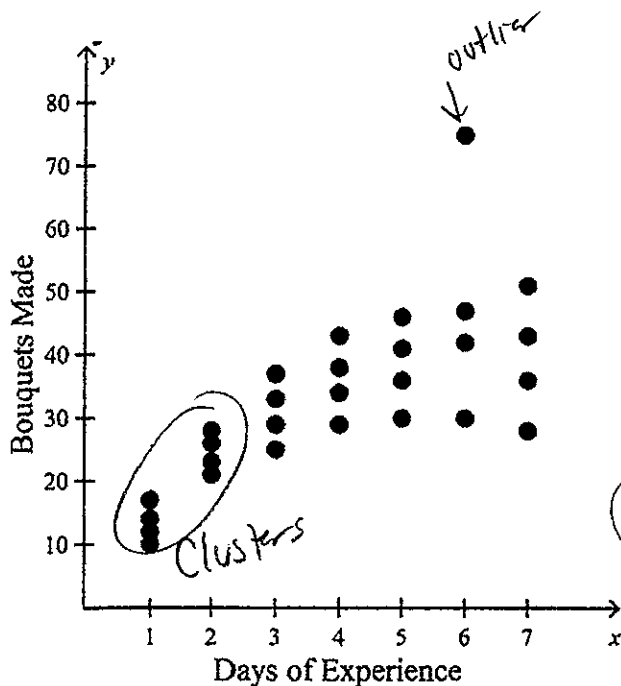
8. Ingrid is preparing for a half marathon by running different numbers of miles in the weeks before the race. The following scatter plot shows the number of miles that Ingrid ran and her time in 8 runs before the half marathon.



Ingrid does one more run before the half marathon. She runs for a total of **70 minutes**. About how many miles will she run during this time?

Answer: 7 miles

9. A floral delivery company conducts a study to measure the effect of worker experience on productivity. Tell whether the scatter plot appears to have a linear or non-linear pattern of association. Describe any clustering and identify any outliers.



Curve = non-linear

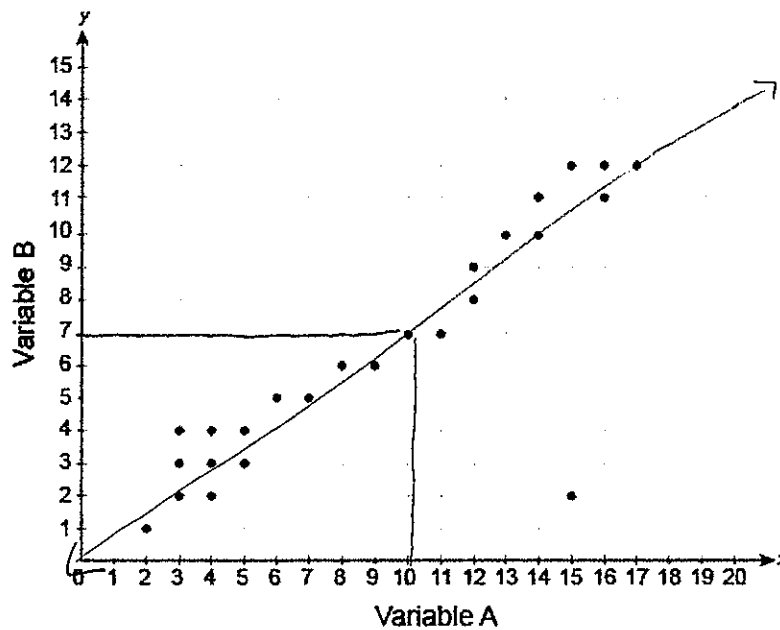
a. The pattern of association appears to be linear. There appears to be clustering of the data points at 1 and 2 days. After that, the results become less clustered. There do not appear to be any outliers.

b. The pattern of association appears to be non-linear. There appears to be clustering of the data points at 6 and 7 days. Before that, the results are less clustered. There do 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 at 1 and 2 days. After that, the results become less clustered. The point near (6, 75) appears to be an outlier.

d. The pattern of association appears to be linear. There appears to be clustering of the data points at 1 and 2 days. After that, the results become less clustered. The point near (6, 75) appears to be an outlier.

10. Use the graph to answer the following questions.



Part A: What type of correlation is represented by the graph? positive

Part B: When $x = 10$, what is the expected y -value? 7

Part C: Identify the outlier by stating its coordinates. (15, 2)