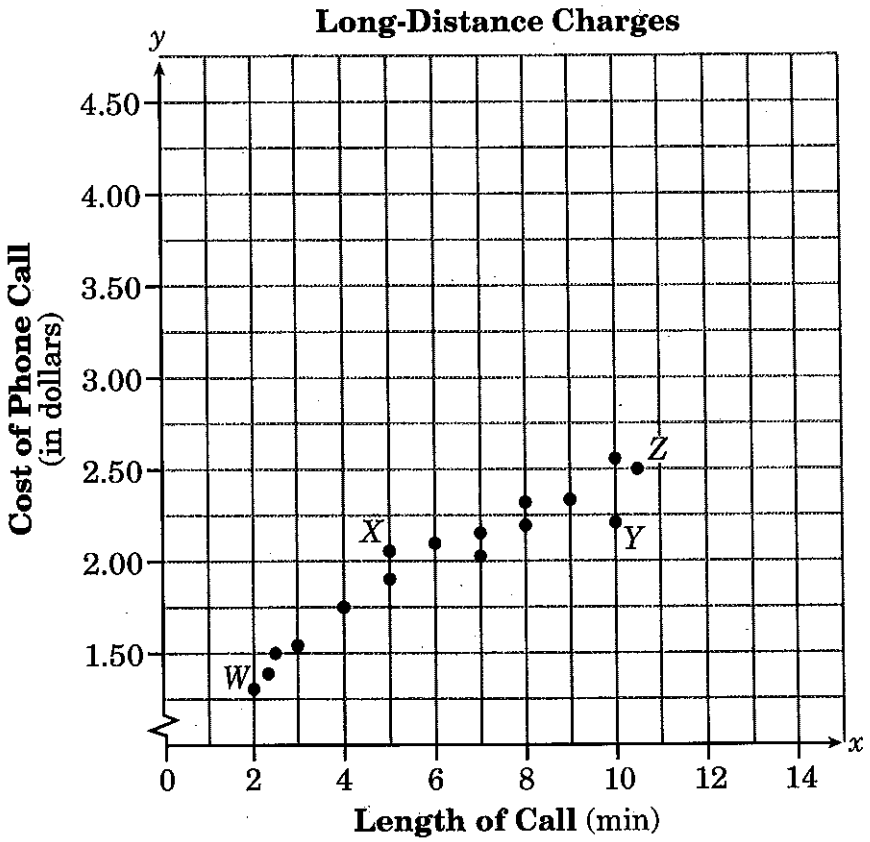
1. Charlie collected data on the cost of his long-distance phone calls. He displayed his data in a scatterplot.



Which point shows the least expensive cost per minute for a long-distance call?

A *W*

B *X*

C *Y*

D *Z*

2. Felipe is collecting data comparing air conditioning costs to the daily outdoor temperature during the summer of 2004. When Felipe draws his scatterplot, which variable should be used as the dependent variable?

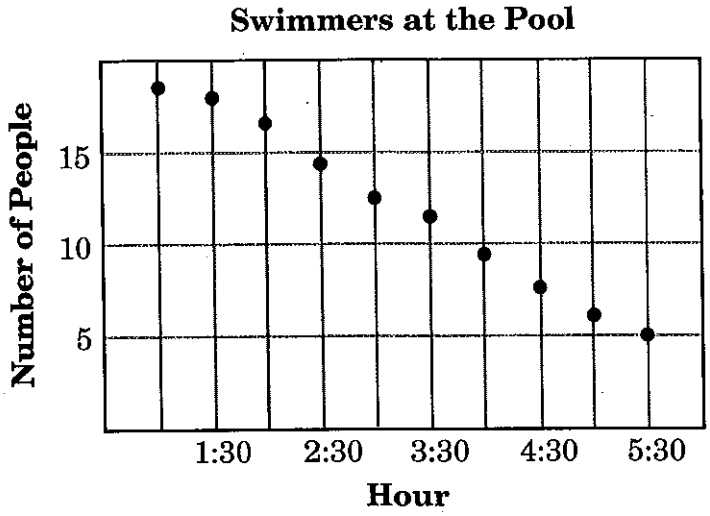
   A date

   B indoor temperature

   C outdoor temperature

   D air conditioning costs

3. The scatterplot below shows the number of people at the swimming pool every half hour from 1:00 p.m. until 5:30 p.m.



From this scatterplot, what conclusion can be made about the number of people at the pool from 1:00 p.m. to 5:30 p.m.?

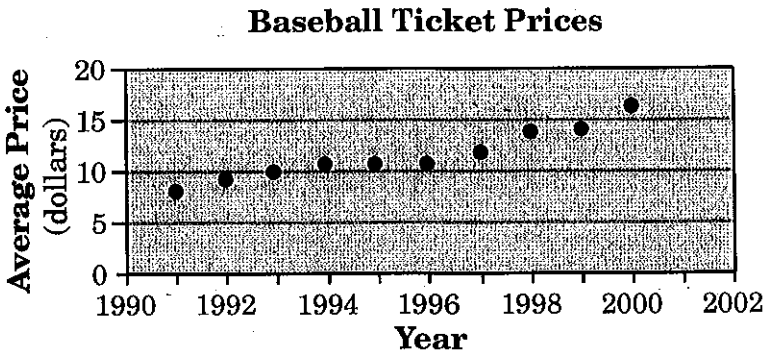
A The number of people at the pool steadily decreases and shows a negative correlation with time.

B The number of people at the pool steadily decreases and shows a positive correlation with time.

C The number of people at the pool steadily increases and shows a negative correlation with time.

D The number of people at the pool steadily increases and shows a positive correlation with time.

4. The scatterplot shows the average price of a major-league baseball ticket from **1991** to 2000.



What correlation, if any, exists in the data?

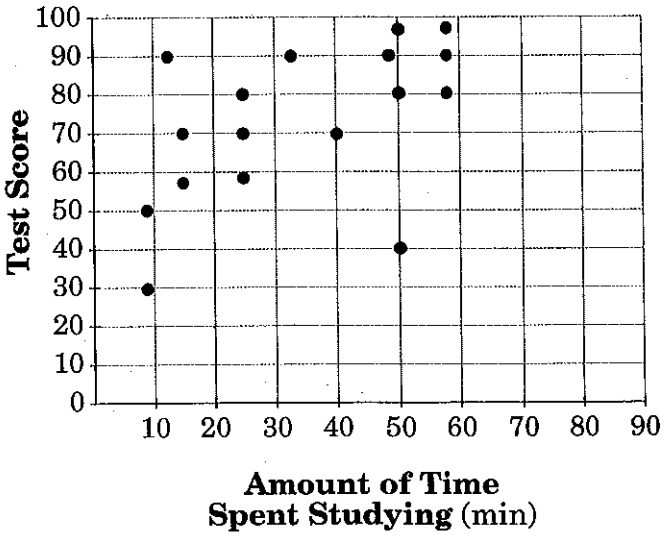
A positive

B negative

C constant

D none

5. Which relationship is suggested by the scatterplot below?



A The amount of time spent studying does not affect a test score.

B the longer the amount of time spent studying, the higher the test score

C the longer the amount of time spent studying, the lower the test score

D the shorter the amount of time spent studying, the higher the test score

6. Jeremy collected data on the elevation and highest temperature of eight cities. He organized his data in a table.

Place	**Elevation** (ft)	**Highest Temp** (°F)
City A	367	136
City B	−178	134
City C	−722	129
City D	622	128
City E	676	120
City F	26	122
City G	72	108
City H	49	59

What relationship between elevation and highest temperature does Jeremy's data suggest?

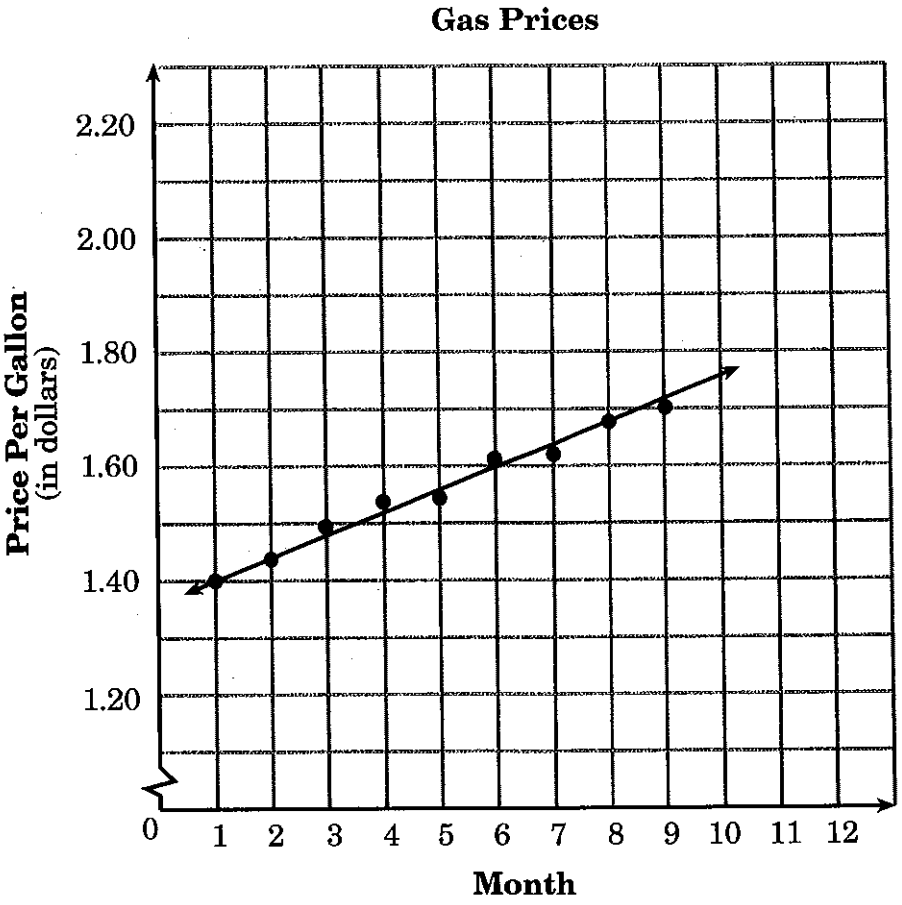
A the higher the elevation, the higher the record temperature

B the lower the elevation, the higher the record temperature

C the lower the elevation, the lower the record temperature

D There is no relationship between elevation and record temperature.

7. Jessica kept track of gas prices for 9 months.



According to the line of best fit shown, what will be the predicted price per gallon of gasoline in month 13?

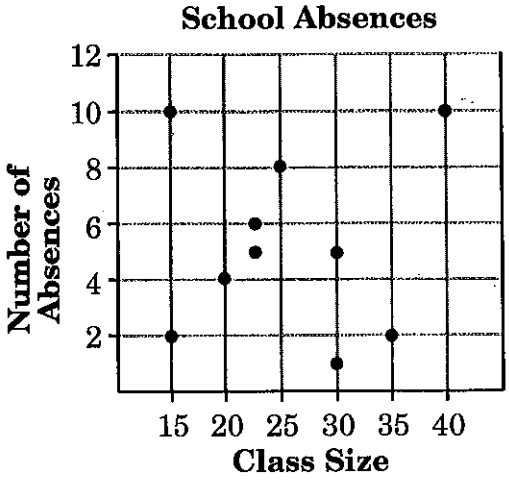
A $1.88

B $1.80

C $1.72

D $1.40

8. The scatterplot shows the number of absences in a week for classes of different sizes. Trevor concluded that there is a positive correlation between class size and the number of absences.



Which statement ***best*** describes why Trevor's conclusion was incorrect?

A The largest class does not have the most absences.

B The smallest class does not have the least number of absences.

C The data show no relationship between class size and number of absences.

D The data show a negative relationship between class size and number of absences.

9. Cheryl surveyed 10 of her classmates and asked them what their favorite type of television show was. Of the 10 students surveyed, 7 indicated that drama was their favorite. Cheryl concluded that dramas are the favorite type of television show for 70% of the 2,000 students at her school. Which choice describes the flaw in Cheryl's study?

A She asked only students at her school.

B She asked only about television shows.

C She asked only television watchers.

D She asked only 10 people.

10. Jodie wants to conduct a survey to find the most popular school lunch among students in her school. Which is the ***best*** sample?

    A a random group of students eating lunch together

    B all the teachers at lunch

    C the first twenty-five students that enter the cafeteria

    D every other student who walks into the cafeteria for every period

End of Goal 4 Sample Items

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