

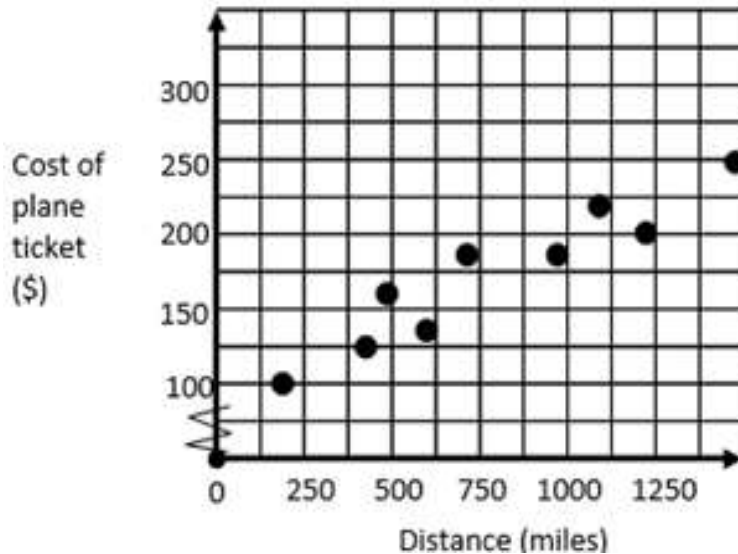


## Using and Comparing Data Representations

*Explain Independent Practice*

**Use the following graph for questions 1 – 3.**

Martha recorded the relationship between the distance she flew and the cost of the airplane ticket on the graph below.

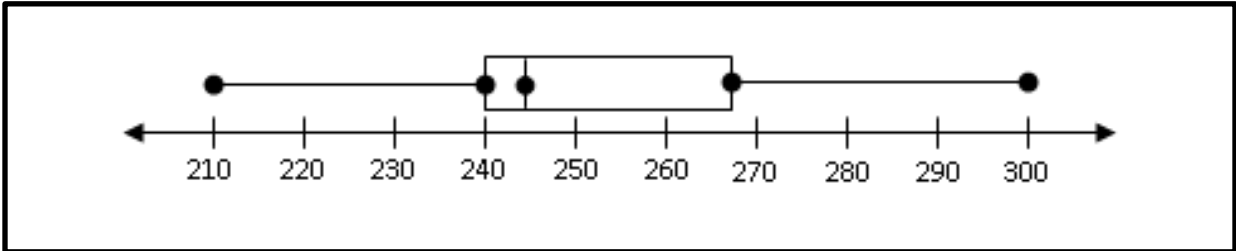


- 1 What type of correlation best represents the relationship in the data?
- 2 According to the relationship shown in the scatterplot, what is the best estimate for the cost of a plane ticket if the flight is 750 miles?
- 3 Based on the information in the scatterplot, what is the relationship between the distance in miles of the flight and the cost of the ticket. Use vocabulary such as increasing, decreasing, etc?



**Use the following graph to answer questions 4 – 9.**

The box plot below summarizes the number of miles a sales representative drove each day during a month.



- 4 According to the graph, what is a reasonable value for the median number of miles driven during the month?
  
- 5 A value of 270 miles driven falls within which quartile?
  
- 6 According to this graph, what is a reasonable value of the 1<sup>st</sup> quartile?
  
- 7 According to this graph, what is a reasonable value of the 3<sup>rd</sup> quartile?
  
- 8 According to this graph, what is a reasonable value of the interquartile range?
  
- 9 According to this graph, 75% of the days the sales representative drove more than how many miles?



**Use the stem-and-leaf plot to answer questions 10 - 12.**

The stem-and-leaf plot shows the lengths, in centimeters, of 12 earthworms the science teacher has for science class rounded to the nearest  $10^{\text{th}}$ . Key:  $10|1 = 10.1$

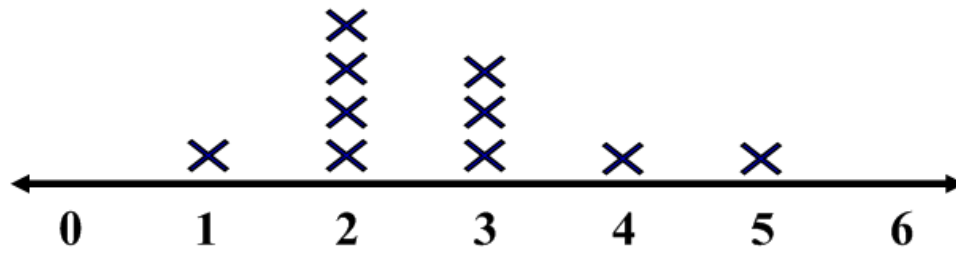
**Lengths of Earthworms  
(centimeters)**

Stem	Leaf
10	1 3 4
11	2 4
12	1 3 6
13	2 5 7
14	3

- 10** What is the length of the shortest earthworm? What is the length of the longest earthworm?
- 11** How many earthworms are longer than 11.2 centimeters?
- 12** What is the median length of this set of earthworms?



**For questions 13 – 16, use the dot plot to answer the questions.**



Number of Pets Owned by Students

**13** What is the set of data graphed on the line plot?

**14** What is the most common value in the set of data?

**15** What is the minimum value in the set of data?

**16** What is the maximum value in the set of data?

