

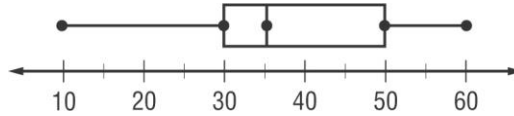
Math 6 - Unit 6: Statistics

Box Plot Practice

Name: _____

Class Period: 1 2 3 4 Date: _____

A **box plot** is a diagram that is constructed using the median, quartiles, and extreme values. A box is drawn around the quartile values, and the whiskers extend from each quartile to the extreme values.



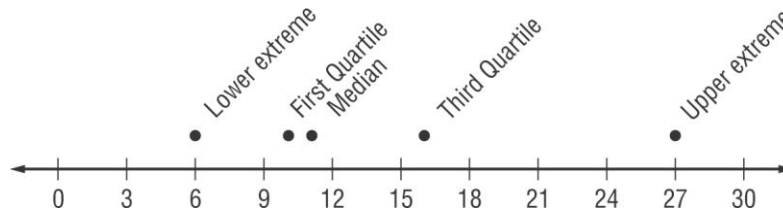
Example 1

The list below shows the number of model airplanes owned by the members of the aviation club. Draw a box plot of the data.

6, 8, 10, 10, 10, 11, 12, 14, 16, 18, 27

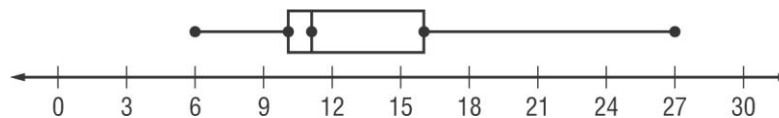
Step 1 Order the numbers from least to greatest. Then draw a number line that covers the range of the data.

Step 2 Find the median, the extremes, and the first and third quartiles. Mark these points above the number line.



Step 3 Draw the box so that it includes the quartile values. Draw a vertical line through the median value. Extend the whiskers from each quartile to the extreme data points.

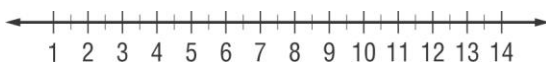
Numbers of Model Airplanes Owned



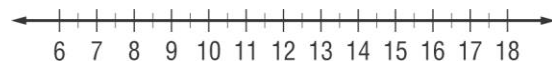
Practice

Draw a box plot for each set of data.

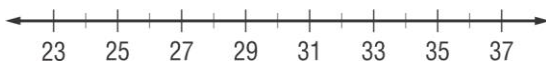
1. {4, 7, 5, 3, 12, 6, 5}



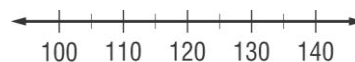
2. {13, 8, 17, 10, 6, 11, 18}



3. {23, 36, 28, 34, 30, 29, 30, 28, 34}

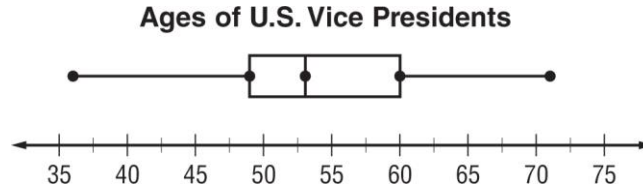


4. {108, 130, 110, 104, 106, 120, 140, 122, 114, 104}



Problem-Solving Practice

U.S. VICE PRESIDENTS Use the box plot that shows the ages of U.S. vice presidents when they took office.



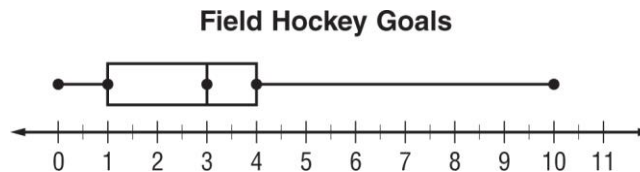
1. Describe the distribution of the data. What can you say about the ages of U.S. vice presidents?

2. What percent of U.S. vice presidents were at least 60 years old when they took office? Explain how you found your answer.

3. What percent of U.S. vice presidents were between the ages of 49 and 60 when they took office? Explain how you found your answer.

4. Can you determine from the box plot whether there are any U.S. vice presidents who took office at exactly age 55 years of age? Explain.

FIELD HOCKEY Use the box plot that shows the number of goals made by members of the field hockey team during the season.



5. Describe the distribution of the data. What can you say about the number of goals made by the members of the field hockey team?

6. What percent of team members scored between 1 and 3 goals this season? Explain.