



Math Virtual Learning

6th Grade Math

Box Plots

May 12, 2020



6th Grade Math

Lesson: May 12, 2020

Objective/Learning Target:

Students will represent and interpret data using box plots.

Warm Up Activity

Find the median of the following data sets.

1. 7, 13, 7, 6, 9, 8, 6, 8, 10, 10

2. 70, 66, 69, 73, 60, 63, 79

3. 70, 82, 85, 70, 90, 83

4. 8, 9, 0, 5, 7, 8, 5, 3

Warm Up Answers

Find the median of the following data sets.

1. 7, 13, 7, 6, 9, 8, 6, 8, 10, 10

Median: 8

2. 70, 66, 69, 73, 60, 63, 79

Median: 69

3. 70, 82, 85, 70, 90, 83

Median: 82.5

4. 8, 9, 0, 5, 7, 8, 5, 3

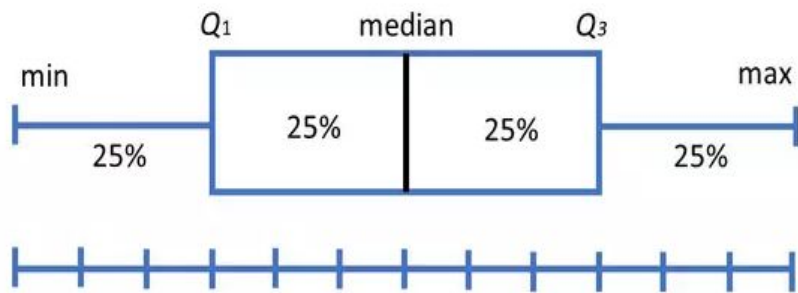
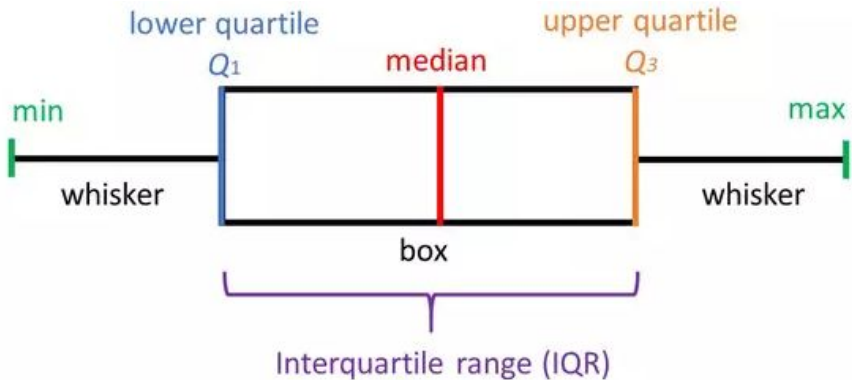
Median: 6

Lesson Videos

[Reading Box Plots](#)

[Constructing a Box Plot](#)

5 Number Summary



Minimum Score

The lowest score, excluding outliers (shown at the end of the left whisker).

Lower Quartile

Twenty-five percent of scores fall below the lower quartile value (also known as the first quartile).

Median

The median marks the mid-point of the data and is shown by the line that divides the box into two parts (sometimes known as the second quartile). Half the scores are greater than or equal to this value and half are less.

Upper Quartile

Seventy-five percent of the scores fall below the upper quartile value (also known as the third quartile). Thus, 25% of data are above this value.

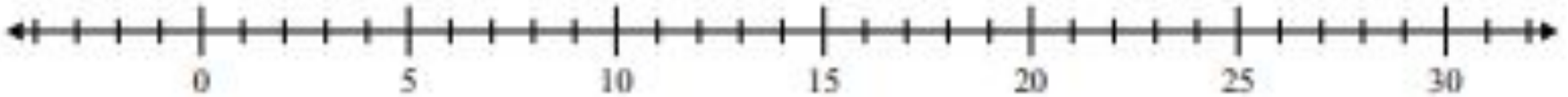
Maximum Score

The highest score, excluding outliers (shown at the end of the right whisker).

Practice #1

Create a box plot from the following data set, using the 5 Number Summary.

11, 15, 17, 5, 12, 6, 9, 18



Minimum: _____

Lower Quartile: _____

Median: _____

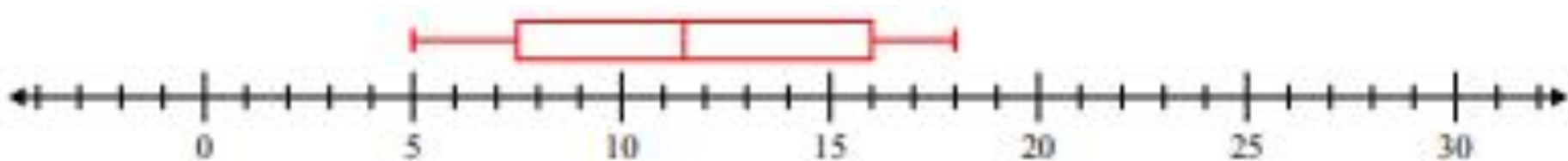
Upper Quartile: _____

Maximum: _____

Practice #1

Create a box plot from the following data set, using the 5 Number Summary.

11, 15, 17, 5, 12, 6, 9, 18



Minimum: 5
Lower Quartile: 7.5
Median: 11.5
Upper Quartile: 16
Maximum: 18

Least to Greatest:
5, 6, 9, 11, 12, 15, 17, 19

Practice #2

Andre, Lin, and Noah each designed and built a paper airplane. They launched each plane several times and recorded the distance of each flight in yards.

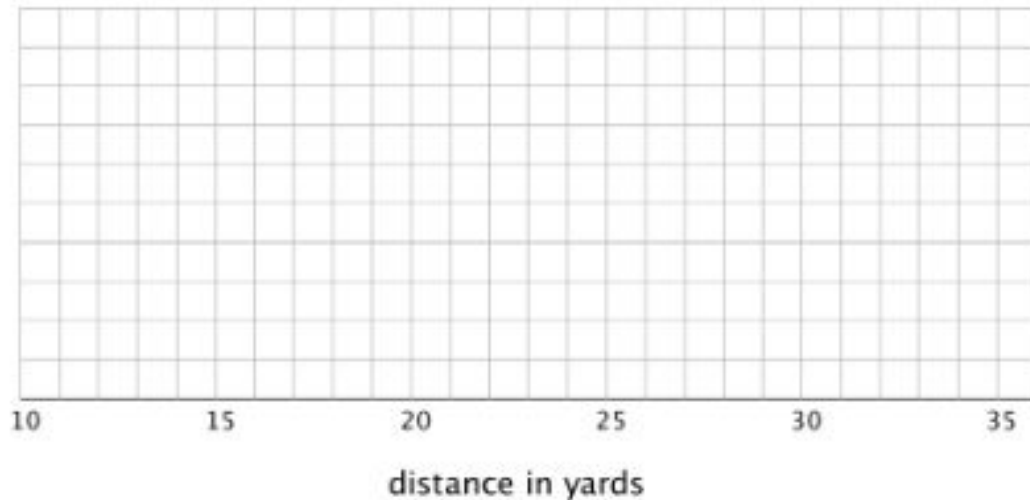
Andre	25	26	27	27	27	28	28	28	29	30	30
Lin	20	20	21	24	26	28	28	29	29	30	32
Noah	13	14	15	18	19	20	21	23	23	24	25

1. Write the five-number summary for the data for each airplane. Then, calculate the interquartile range for each data set.

	min	Q1	median	Q3	max	IQR
Andre						
Lin						
Noah						

Practice #2

2. Draw three box plots, one for each paper airplane. Label the box plots clearly.



Practice #2

1.

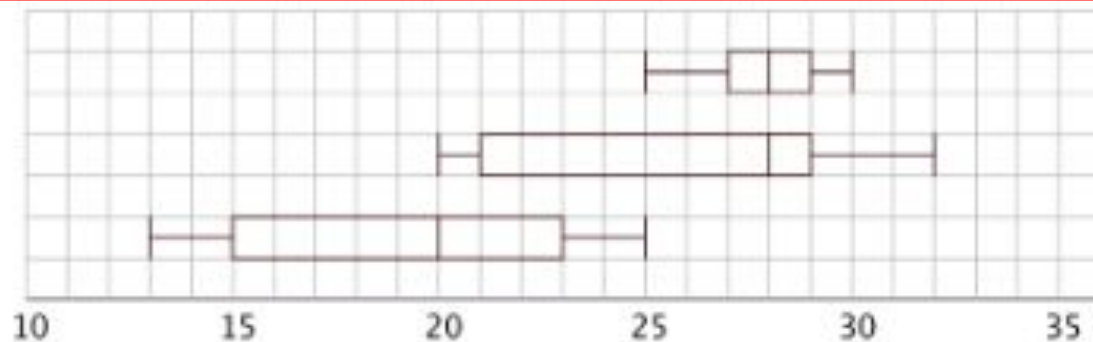
	min	Q1	Q2 (median)	Q3	max	IQR
Andre	25	27	28	29	30	2
Lin	20	21	28	29	32	8
Noah	13	15	20	23	25	8

2.

Andre

Lin

Noah



distance in yards

Summary/Reflection

**What pieces of information can you find from a box plot?
How is a box plot different than dot plot? Do they give
you the same information or different information?**

Additional Practice:

Click on the link below to get additional practice and to check your understanding!

Practice:

[Khan Academy: Creating Box Plots](#)

[Khan Academy: Reading Box Plots](#)

[IXL: Box Plots](#)