

6th Grade  
June 2, 2021

Today we will:

- Review HW
- Work on classwork

HOMEWORK:

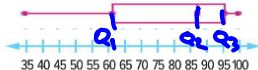
None



**Box and Whisker Plots, Ch12 Lesson 3, Due June 2**

Draw a box plot for each set of data. (Example 1)

🏠 (65, 92, 74, 61, 55, 35, 88, 99, 97, 100, 96)



Numbers in order: 35, 55, 61, 65, 74, 88, 92, 96, 97, 99, 100 ← max

Median: 88

Q1: 61

Q3: 97

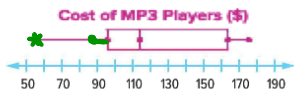
Max: 100

\* Min: 35 55

\* Outliers: None 35

2.

Cost of MP3 Players (\$)	
95	55
105	100
85	158
122	174
165	162



Numbers in order: 55, 85, 95, 100, 105, 122, 158, 162, 165, 174

Median: 113.5

$$\frac{100 + 122}{2} = 113.5$$

Q1: 95

Q3: 162

Max: 174

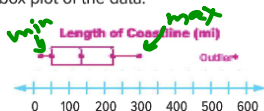
\* Min: 55 85

Outliers: None 55

🏠 The table shows the length of coastline for the 13 states along the Atlantic Coast. (Examples 1-3)

a. Make a box plot of the data.

Length of Coastline (mi)	
28	130
580	127
100	301
228	40
31	187
192	112
13	



Numbers in order: 13, 28, 31, 40, 100, 112, 127, 130, 187, 192, 228, 301, 580

Median: 127

Q1: 35.5

Q3: 210

Max: 301

Min: 13

Outliers: 580

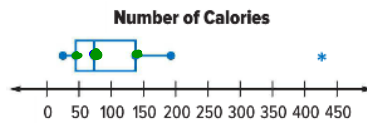
b. Half of the states have a coastline less than how many miles?

127 mi

c. Write a sentence describing what the length of the box plot tells about the number of miles of coastline for states along the Atlantic coast.

The length of the box plot shows that the number of miles of coastline for the top 25% of states varies greatly (is spread out). The number of miles of coastline for the bottom 25% of states is more concentrated.

4. The amount of Calories for a serving of certain fruits is displayed. Find the median and the measures of variability. Then describe the data. (Example 4)



Median=75

Q1=50

The right half of the data is more spread out and the left half is more concentrated.

Q3=140

Range=400

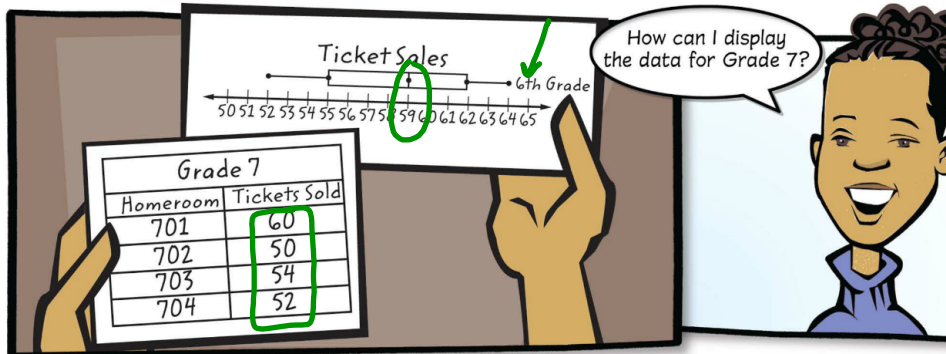
The median is closer to the first quartile.

IQR=90

$Q_3 - Q_1$

Outlier? 425

5. **MP Model with Mathematics** Refer to the graphic novel frame below for Exercises a–b.



- a. Draw a box plot using the data for Grade 7.

Numbers in order: 50, 52, 54, 60

Median: 53

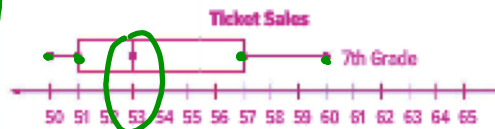
Q1: 51

Q3: 57

Max: 60

Min: 50

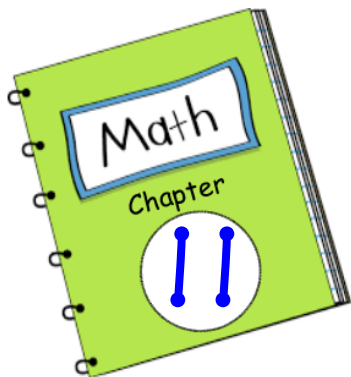
Outliers: None



- b. Compare the box plots. Which grade sold more tickets? Explain.

The median, max, and quartiles are all higher for Grade 6.  
Grade 6 sold more tickets.

Please update your table of contents:



# TITLE: Statistical Measures

Date	Lesson	Topic/Assignment
May 17	1-2	Mean, Median, Mode, Range Video Notes
May 17	1-2	Practice WS
May 18	3	Quartiles, IQR, Outliers Video Notes
May 19	1-3	HW Practice WS
May 19	3	Skills Practice WS
<b>Unit 12: Statistical Displays</b>		
May 26	1	Line Plots Video Notes
May 26	1	HW Practice WS
May 27	2	Histograms Video Notes
May 27	2	HW Practice WS
May 28	1-2	Review WS
June 1	3	Box Plots In-Class Notes
June 1	3	Pg 883 WS
June 2	3	HW Practice WS

12-3 Classwork Complete and put in binder.

Name \_\_\_\_\_

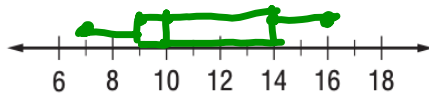
Box and Whisker Plots, Ch12 Lesson 3, June 2

## Lesson 3 Homework Practice

### Box Plots

Draw a box plot for each set of data.

1. ages of children taking dance classes: 10, 8, 9, 7, 10, 12, 14, 14, 10, 16



Numbers in order: 7, 8, 9, 10, 10, 12, 14, 14, 16

Median: 10

Q1: 9

Q3: 14

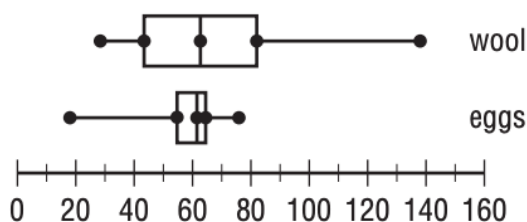
Max: 16

Min: 7

Outliers: none

**PRODUCTS** Use the box plot that shows the average prices in cents per pound farmers received for eggs and wool.

Prices per pound received (¢)



- a. How do the median egg prices and the median wool prices compare?  
*They are the same*
- b. How do the range in egg prices and the range in wool prices compare?  
*Wool has a bigger range.*
- c. In the wool prices, which quartile shows the greatest spread of data?  
*4th quartile*
- d. About what percent of the data for the wool prices is above the third quartile for the egg prices? *50%.*
- e. In general, do farmers get higher prices for eggs or wool?  
 Justify your reasoning. *Wool - Q<sub>1</sub> is higher*

*4th is higher than all  
 other  
 egg prices*

