



Math Virtual Learning

Grade 7

Interquartile Range

April 28, 2020



Grade 7/Interquartile Range
Lesson: April 28, 2020

Objective/Learning Target: Students will find and interpret range and interquartile range.

Let's Get Started:
Watch Video: [Interquartile Range](#)

Practice: Range vs. Interquartile Range(IQR)

Find the range and the interquartile range of the data.

	Rainfall (inches)
1998	90
1999	56
2000	60
2001	59
2002	74
2003	76
2004	81
2005	91
2006	47
2007	59

First, place the data in order from smallest to largest. The range is the difference between the minimum and maximum rainfall amounts.

47, 56, 59, 59, 60, 74, 76, 81, 90, 91

RANGE: $91 - 47 = 44$

Correct Answer

To find the *IQR*, first identify the quartiles, and then compute $Q_3 - Q_1$.

Q₁ Median Q₃
47, 56, 59, 59, 60 | 74, 76, 81, 90, 91

IQR: $81 - 59 = 22$

Correct Answer

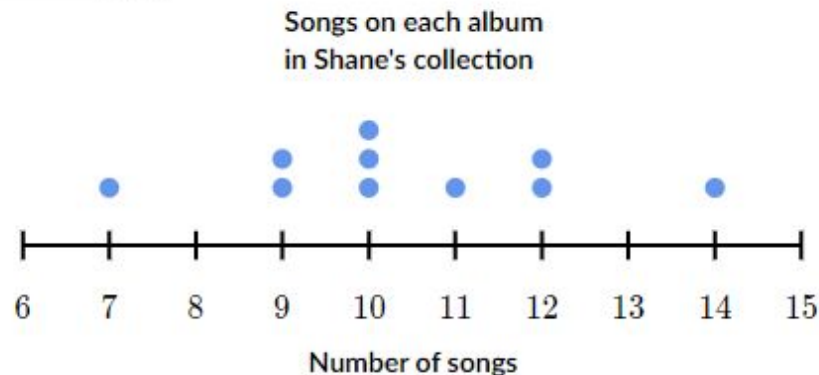
Practice:

Go to this website: [Interquartile Range](#)

1. Type in your answer, and then click “check” at the bottom right of the screen.
2. Remember if you get stuck, you can watch a video or use a hint.

Find the interquartile range (IQR) of the data in the dot plot below.

songs



Stuck? [Watch a video or use a hint.](#)



Practice:

Answer the questions on a piece of paper.

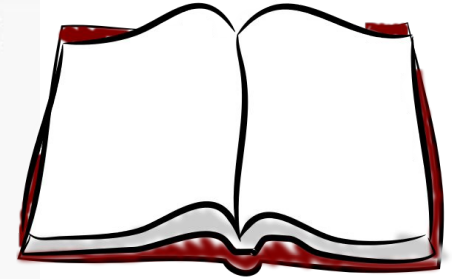
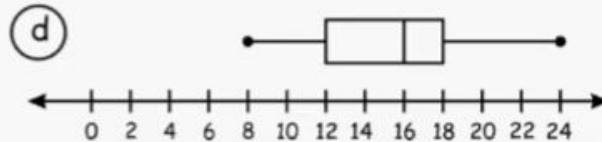
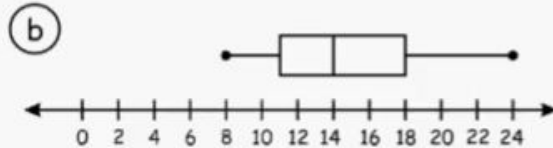
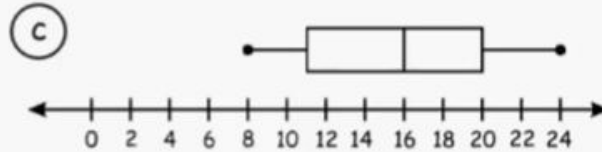
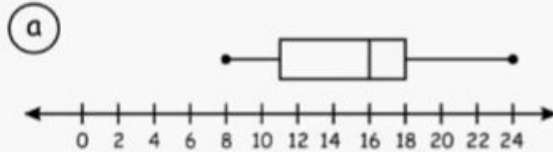
Find the range and interquartile range for each set of data.

The data below represents the number of pages 15 students read from their assigned novel during class.

8 , 8 , 10 , 11 , 12 , 12 , 13 , 14 , 16 , 16 , 18 , 18 , 18 , 20 , 24



Which box plot correctly summarizes the data?



range _____

interquartile range _____

Practice:

Answer the questions on a piece of paper.

Find the range and interquartile range for each set of data.

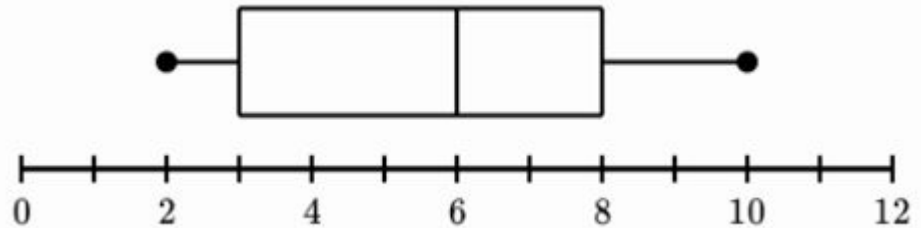
Basketball Team Free Throw Percentages

50, 98, 25, 76, 88, 75, 80

range _____ interquartile range _____



Number of Eggs Laid



range _____ interquartile range _____



Practice:

Answer the questions on a piece of paper.
Find the range and interquartile range for each set of data.

Monday



Tuesday



Wednesday



Thursday



Friday



Saturday



Sunday



range _____

interquartile range _____

Answer Key:

Once you have completed the problems, check your answers here.

The data below represents the number of pages 15 students read from their assigned novel during class.

8, 8, 10, 11, 12, 12, 13, 14, 16, 16, 18, 18, 18, 20, 24

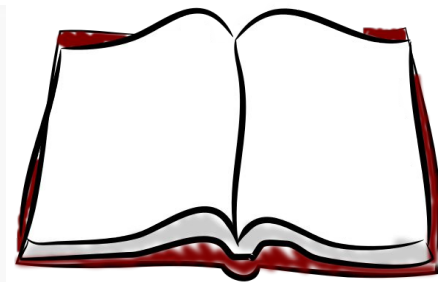
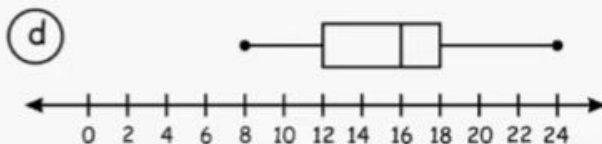
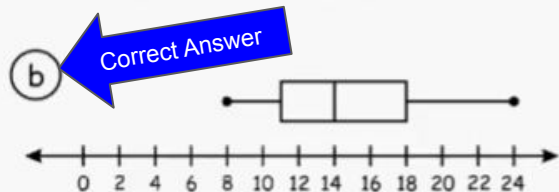
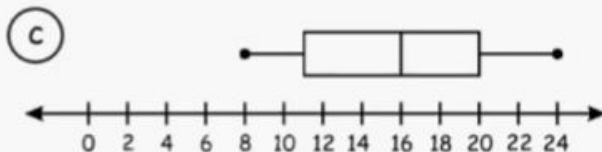
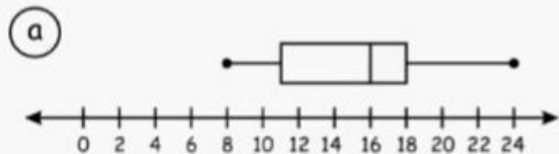
Q1

Q2 - Median

Q3



Which box plot correctly summarizes the data?



range 16

Maximum - Minimum = Range
 $24 - 8 = 16$

interquartile range 7

$Q3 - Q1 = IQR$
 $18 - 11 = 7$

Answer Key:

Once you have completed the problems, check your answers here.

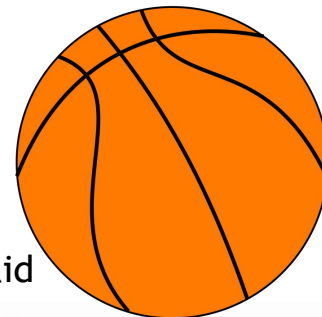
Basketball Team Free Throw Percentages

50, 98, 25, 76, 88, 75, 80 → 25, 50, 75, 76, 80, 88, 98
Q1 Q2 Q3

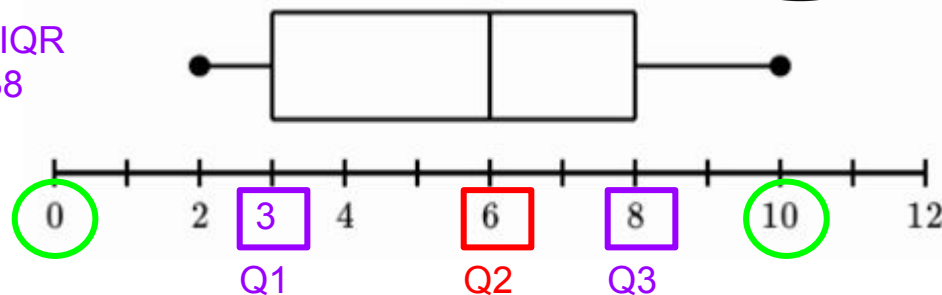
range 73 interquartile range 38

Maximum - Minimum = Range
 $98 - 25 = 73$

$Q3 - Q1 = IQR$
 $88 - 50 = 38$



Number of Eggs Laid



range 10 interquartile range 5

Maximum - Minimum = Range
 $10 - 0 = 10$

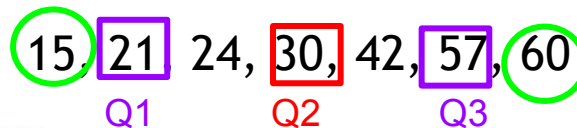
$Q3 - Q1 = IQR$
 $8 - 3 = 5$



Answer Key:

Once you have completed the problems, check your answers here.

Monday



Tuesday



Wednesday



range 45

Thursday



Maximum - Minimum = Range
 $60 - 15 = 45$

Friday



interquartile range 36

Saturday



$Q3 - Q1 = IQR$
 $57 - 21 = 36$

Sunday



Additional Practice:

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

[Quizizz](#) - Practice

[IXL](#) - Practice

[Open Middle](#) - Challenge (Box Plots)