

6th Grade
May 20, 2021

Today we will:

- Review HW
- Practice statistics with ALEKS assignment

HOMEWORK:

ALEKS assignment due tomorrow



Mean Median Mode Range

Hey Diddle Diddle,
the **MEDIAN** is the **middle**
You add then divide for the **MEAN**
The **MODE** is the one
that appears there **most**
And the **RANGE** is
the **difference** between!

Check completed notes/HW and put in binder if it is not already.

Skills Practice WS, Ch11 Lesson 3, May 20

Lesson 3 Skills Practice ****Don't forget to put in order least to greatest!**
Measures of Variation

Find the range, median, first and third quartiles, and interquartile range for each data set. Name any outlier

1.

Number of Boxes of Popcorn Sold						
52	72	96	21	58	40	75

Put in order: 21 40 52 58 72 75 96
Q₁ median Q₃

Range = $96 - 21 = 75$
 Median = 58
 $Q_1 = 40$
 $Q_3 = 75$
 IQR = $75 - 40 = 35$
 Outlier? No

2.

Number of Text Messages Sent							
20	23	18	4	17	21	15	56

Put in order: 4 15 17 18 20 21 23 56
 $Q_1 = \frac{15+17}{2} = 16$ median = $\frac{18+20}{2} = 19$ $Q_3 = \frac{21+23}{2} = 22$

Range = $56 - 4 = 52$
 Median = 19
 $Q_1 = 16$
 $Q_3 = 22$
 IQR = $22 - 16 = 6$
 Outlier? 4 and 56

3.

Test Grades								
83	83	85	87	89	88	67	79	81

Put in order: 67 79 81 83 83 85 87 88 89
Q₁ median Q₃
 $Q_1 = \frac{79+81}{2} = 80$ $Q_3 = \frac{87+88}{2} = 87.5$

Range = $89 - 67 = 22$
 Median = 83
 $Q_1 = 80$
 $Q_3 = 87.5$
 IQR = $87.5 - 80 = 7.5$
 Outlier? 67

4.

Ages of Grandmothers (yr)								
59	72	65	51	62	77	82	64	54

51. 54 | 59 62 (64) 65 72 | 77 82
 $Q_1 = \frac{54+59}{2} = 56.5$ median $Q_3 = \frac{72+77}{2} = 74.5$

Range: $82 - 51 = 31$

Median: 64

$Q_1 = 56.5$

$Q_3 = 74.5$

IQR = 18

Outlier? No

5.

Time to Sprint 40 Meters (s)									
6.3	6.7	6.2	4.9	6.7	6.6	6.1	6.3	6.4	5.8

4.9 5.8 (6.1) 6.2 6.3 | 6.3 6.4 (6.6) 6.7 6.7
 Q_1 median = 6.3 Q_3

Range: $6.7 - 4.9 = 1.8$

Median = 6.3

$Q_1 = 6.1$

$Q_3 = 6.6$

IQR = $6.6 - 6.1 = 0.5$

Outlier? 4.9 (In reference to the rest of the sprint times, 4.9 is much faster than the rest, which are around 6 seconds or higher.)

6.

Number of DVDs									
15	16	18	9	18	17	19	19	4	36

4 9 (15) 16 17 | 18 18 (19) 19 36
 Q_1 Median = $\frac{17+18}{2} = 17.5$ Q_3

Range: $36 - 4 = 32$

Median = 17.5

$Q_1 = 15$

$Q_3 = 19$

IQR = $19 - 15 = 4$

Outlier? 4 and 36 (4 is iffy as a low outlier because of 9, but 36 is an outlier for sure.)

