Lesson 7.8 Measures of Variability: Range

The **range** of a data set is the difference between the largest value and smallest value contained in the data set.

11, 12, 15, 15, 13, 12

11, 12, 12, 13, 15, 15

11, 12, 12, 13, 15, 15

15 – 11 =

4

1. Put the data set in order from least to greatest.
2. Find the largest value and smallest value.
3. Subtract.
4. The range of this data set is 4.

Find the range of each data set.

a	b
1. 11, 10, 12, 9	79, 79, 79, 84
2. 25, 30, 32, 23, 27, 22	96, 94, 101, 96, 91, 92
3. 36, 33, 37, 37, 41, 33	506, 508, 510, 509
4. 277, 280, 287, 276	10, 8, 9, 12, 6, 8
5. 12, 9, 16, 9	95, 92, 89, 97, 94, 88

Lesson 7.9 Measures of Variability: Interquartile Range

The **interquartile range** (IQR) of a data set is the difference between the median of the lower half of a data set and the median of the upper half of the same data set.

13, 15, 9, 35, 25, 17, 19

9, 13, 15, 17, 19, 25, 35   1. Put the data set in order from least to greatest.

9, 13, 15   17   19, 25, 35   2. Find the lower half, median, and upper half of the data set.

Q1=13   Q3=25   3. Find the medians of the lower half and upper half.

25 − 13 =   4. Subtract.

12   5. The interquartile range of the data set is 12.

Find the interquartile range for each set of data.

a

1. 6, 1, 3, 8, 5, 11, 1, 5

median: _____

Q1: _____

Q3: _____

IQR: _____

b

80, 90, 95, 85, 70

median: _____

Q1: _____

Q3: _____

IQR: _____

2. 70, 75, 90, 100, 95

median: _____

Q1: _____

Q3: _____

IQR: _____

45, 43, 13, 11, 5, 2

median: _____

Q1: _____

Q3: _____

IQR: _____

3. 45, 39, 17, 16, 4, 1

median: _____

Q1: _____

Q3: _____

IQR: _____

29, 58, 15, 75, 22, 16, 64

median: _____

Q1: _____

Q3: _____

IQR: _____

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