

Learning Target: Find and interpret the range of a data set.**Success Criteria:**

- I can find the range of a data set.
- I can interpret the range of a data set.

Think and Grow

Key Idea A **measure of variation** describes how a data set is spread out. One measure of variation is the *range*. The **range** of a data set is the difference of the greatest value and the least value.

Example The table shows the times spent on a science exam. Find and interpret the range of the times.

To find the least and the greatest values, order the times from least to greatest.

| Times (minutes) | | | | |
|-----------------|----|----|----|----|
| 28 | 36 | 40 | 33 | 50 |
| 36 | 48 | 37 | 30 | 45 |

_____, _____, _____, _____, _____, _____, _____, _____, _____

The least value is _____. The greatest value is _____.

Range: _____ - _____ = _____

So, the range of the times is _____ minutes. This means that

the times vary by no more than _____ minutes.

Show and Grow

Find and interpret the range of the data.

1. Ages of kids at a park (years): 5, 9, 3, 7, 6, 5, 7, 4, 8

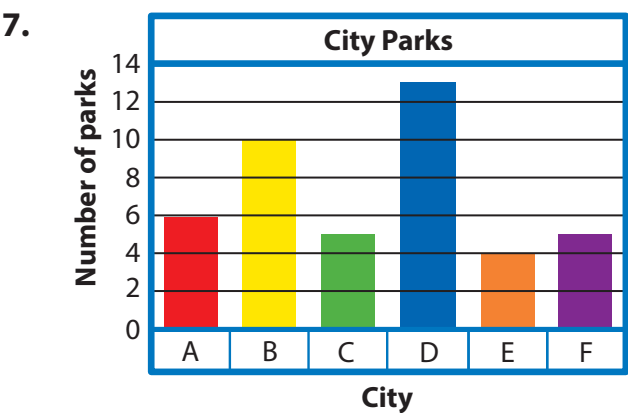
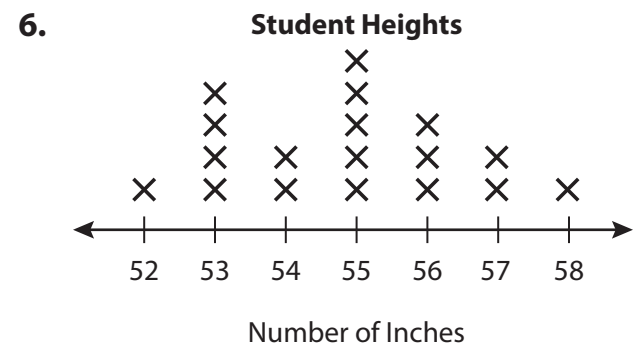
2. Concert ticket prices (in dollars): 252, 51, 75, 95, 87, 140, 175

3. 100-yard dash times (seconds): 10.5, 10.8, 11.0, 11.2, 10.1, 12.6, 10.8

Find and interpret the range of the data.

4. Number of pages in several novels: 285, 324, 192, 378, 241, 412, 280, 396

5. Puppy weights (pounds): 7.4, 8.7, 5.5, 9.2, 4.8, 7.5, 6.9, 7.2



Find the mean, median, mode, and range of the data.

8. 95, 76, 84, 91, 97, 97, 98, 77, 86

9. 2.1, 7.0, 1.5, 2.9, 6.1, 4.5, 7.9, 5.8, 7.2

10. **Which One Doesn't Belong?** Which measure does *not* belong with the other three? Explain.

- mean
- median
- mode
- range

11. **DIG DEEPER!** Create a data set with 7 values that has a mean of 25 and a range of 12.

12. **Modeling Real Life** The tables show the points scored each game in a season by two football teams. Find the mean and range of the points scored by each team. Compare and interpret the results.

| Team A | | | |
|--------|----|----|----|
| 24 | 18 | 35 | 14 |
| 20 | 24 | 28 | 21 |

| Team B | | | |
|--------|----|----|----|
| 27 | 18 | 21 | 42 |
| 10 | 7 | 28 | 31 |



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