**7.** 39, 40, 44, 48, 49, 52, 54, 58, 62

The least value is 39. The greatest value is 62. So, the range is $62 - 39 = 23$.

**8.** 117, 127, 133, 146, 152, 168, 174

The least value is 117. The greatest value is 174. So, the range is $174 - 117 = 57$.
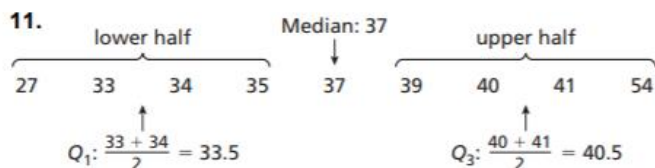
**9.** 1.6, 3.4, 3.8, 4.2, 4.8, 5.5, 7.5, 8.9

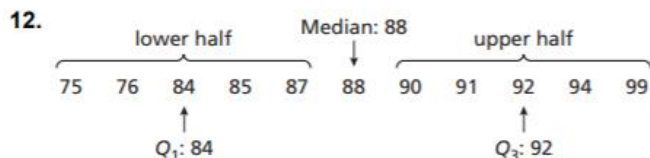The least value is 1.6. The greatest value is 8.9. So, the range is $8.9 - 1.6 = 7.3$.

**10.** The range of an unordered data set is not the difference between the first and the last value. The range is the difference between the greatest value and the least value.
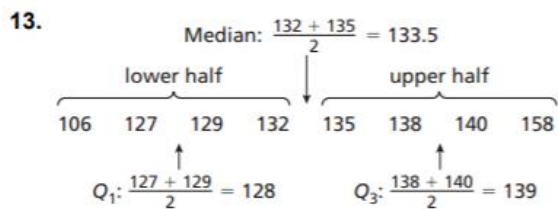35, 38, 41, 44, 48, 49, 51
The range is $51 - 35 = 16$.

**11.**

| lower half | | | | Median: 37 | upper half | | | |
|---|---|---|---|---|---|---|---|---|
| 27 | 33 | 34 | 35 | 37 | 39 | 40 | 41 | 54 |

$Q_1$: $\frac{33 + 34}{2} = 33.5$     $Q_3$: $\frac{40 + 41}{2} = 40.5$

The interquartile range is $Q_3 - Q_1 = 40.5 - 33.5 = 7$.

**12.**

| lower half | | | | Median: 88 | upper half | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 75 | 76 | 84 | 85 | 87 | 88 | 90 | 91 | 92 | 94 | 99 |

$Q_1$: 84     $Q_3$: 92

The interquartile range is $Q_3 - Q_1 = 92 - 84 = 8$.

**13.**

Median: $\frac{132 + 135}{2} = 133.5$

| lower half | | | | upper half | | | |
|---|---|---|---|---|---|---|---|
| 106 | 127 | 129 | 132 | 135 | 138 | 140 | 158 |

$Q_1$: $\frac{127 + 129}{2} = 128$     $Q_3$: $\frac{138 + 140}{2} = 139$

The interquartile range is $Q_3 - Q_1 = 139 - 128 = 11$.