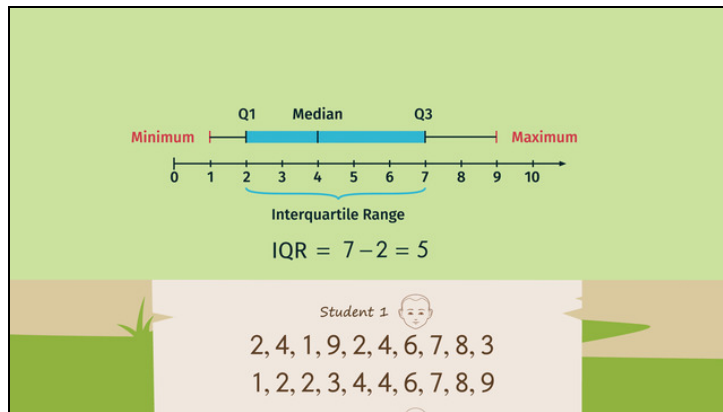




Printable Worksheets from [sofatutor.com](https://www.sofatutor.com)

## Box-and-whisker plots



- 1 Label the values in a box-and-whisker plot.
- 2 Explain how to create a box-and-whisker plot.
- 3 Find the right box-and-whisker plot.
- 4 Compare the different data sets.
- 5 Find the data set(s) corresponding to the box-and-whisker plot pictured.
- 6 Determine the interquartile range (*IQR*)
- + with lots of tips, answer keys, and detailed answer explanations for all of the problems.



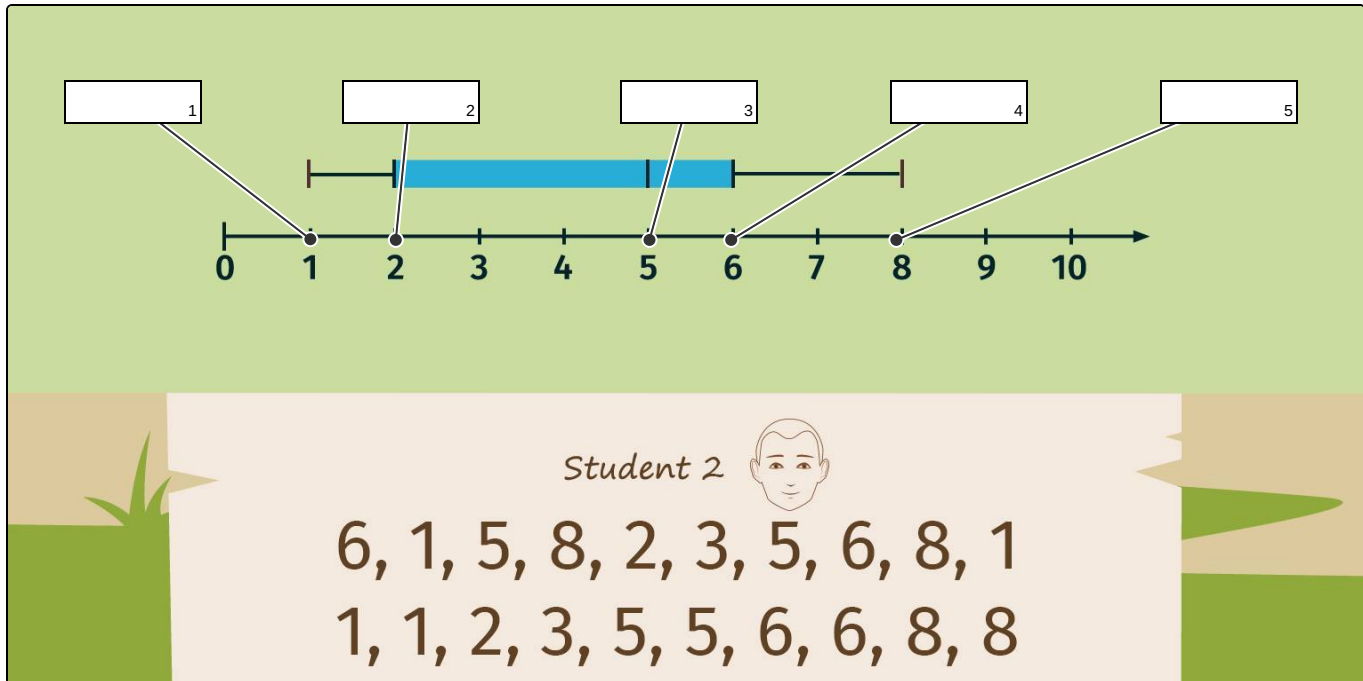
The complete package, including all problems, hints, answers, and detailed answer explanations is available for all [sofatutor.com](https://www.sofatutor.com) subscribers.



## Label the values in a box-and-whisker plot.

Fill in the blanks.

- 





## Hints for solving these problems

1  
of 6

### Label the values in a box-and-whisker plot.

#### Hint #1

The minimum is the lowest and the maximum the highest value of a data list.

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#### Hint #2

The median lies in the middle of a sorted data list. It divides the list in two halves of the same size.

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#### Hint #3

The quartiles are the medians of the halves of a list:

$Q_1$  ( $Q_3$ ) is the median of the first (second) half of the list.

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#### Hint #4

minimum  $\leq Q_1 \leq$  median  $\leq Q_3 \leq$  maximum

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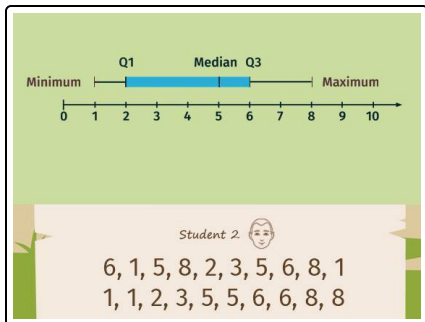


## Answers and detailed answer explanations for these problems

1  
of 6

### Label the values in a box-and-whisker plot.

**Answer key:** 1: Minimum // 2:  $Q_1$  // 3: Median // 4:  $Q_3$  // 5: Maximum



Here you see the solution pictured.

The data list as well as the sorted data list is already given.

The minimum, 1, is the most left and the maximum, 8, the most right value.

The median lies in the middle of the list. The given list has an even number of entries, so the median is the average of the two middle data points, 4 and 4. Thus the median is 4.

The quartiles are medians as well, each time for lists with an odd number of entries:

- $Q_1 = 2$  is the median of the first half 1, 1, 2, 3, 5.
- $Q_3 = 6$  is the median of the second half 5, 6, 6, 8, 8.