

Lesson 2-4 • Group 1

Reinforce Understanding

2.4 Small Group • Group 1

With my small group, I can make and read a box plot to summarize a data set — one step at a time, with support.

Worked model

Seven daily high temperatures in degrees are 58, 71, 64, 83, 66, 77, 61. Build the box plot.

1. Order the values: 58, 61, 64, 66, 71, 77, 83.
2. Mark the median, 66 — the middle value of the seven.
3. Lower half 58, 61, 64 gives quartile 1 as 61. Upper half gives quartile 3 as 77.
4. Draw a box from 61 to 77 with a line at 66, then whiskers out to 58 and to 83.

Answer: Five-number summary: 58, 61, 66, 77, 83. The box covers the middle half of the data.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. On a box plot, what does the line inside the box represent?

Circle the letter of the best answer. Show how you know.

- A. The median
- B. The mean
- C. The mode
- D. The range

Show your work

2. Order the steps for making a box plot.

Write the name of the correct group on each line.

Groups: Steps (in order)

- _____ Step 1: Order the data from least to greatest
- _____ Step 2: Find the median (middle value)
- _____ Step 3: Find Q1 (median of the lower half)
- _____ Step 4: Find Q3 (median of the upper half)
- _____ Step 5: Draw the box from Q1 to Q3 with a line at the median, and whiskers to min and max