



Center, spread & shape of a distribution

GRADE 6 MATH

Name _____

Date _____

Answer every item. Sketch the distribution where it helps; final answers in the boxes. One skill: **describing a distribution by center, spread and shape.**

WORKED EXAMPLE

Describe a distribution three ways. **Center** — where is it clustered? **Spread** — how far apart are the values (highest – lowest)? **Shape** — symmetric, or does one long **tail** stretch out? Skew is named for the **tail**, not the peak: a long tail to the right means **skewed right**, even though the hump is on the left.

1. A data set is 2, 3, 4, 4, 4, 5, 6. Give its center and its spread.

FLUENCY

Show your thinking

Answer

2. A data set is 1, 1, 2, 2, 2, 3, 9. Describe its shape and say where the peak is.

APPLICATION

Show your thinking

Answer

3. A data set is 1, 7, 8, 8, 8, 9, 9. Describe its shape and say where the peak is.

APPLICATION

Show your thinking

Answer

4. Explain why a distribution with a long tail to the LEFT is called “skewed left” even though most of the data sits on the right.

REASONING

Show your thinking

Answer