



Displaying data in dot plots

GRADE 6 MATH

Name _____

Date _____

Do this on your own — the worked example shows what to do. Draw your number line with a ruler and label every value. One skill: **dot plots**.

WORKED EXAMPLE

One dot per observation. Position = the value, height = how many. Every whole number from lowest to highest goes on the axis, evenly spaced, including empty ones. Total dots must equal the number of observations.

1. A dot plot has stacks of 3, 4, 2, 2 and 1 dots. How many observations are in the data set?

FLUENCY

Show your thinking

Answer

2. For that same plot, how tall is the tallest stack?

FLUENCY

Show your thinking

Answer

3. For that same plot, how tall is the shortest non-empty stack?

FLUENCY

Show your thinking

Answer

4. Using the pet data 0, 0, 1, 1, 1, 1, 2, 2, 3, 5, find the median.

APPLICATION

Show your thinking

Answer

5. Using the same pet data, find the mode. Explain how the dot plot shows it at a glance.

APPLICATION

Show your thinking

Answer

6. Explain how you can check a dot plot is complete without seeing the original list.

REASONING

Show your thinking

Answer

7. Why does a dot plot use one dot per observation rather than one dot per different value? What would be lost?

REASONING

Show your thinking

Answer

8. In the pet data, the value 5 has a stack of just one dot. Explain why a short stack can still be the most interesting part of a data set.

REASONING

Show your thinking

Answer