

Mode, range and choosing a measure

WHAT THIS LESSON TEACHES

The mode is the number that appears most often in a data set. Use the mode instead of the mean when outliers make the mean misleading. The range is largest minus smallest.

→ In GAA goals {2, 2, 2, 8, 100} the mode is 2.

→ For scores {6, 6, 6, 9} the range is $9 - 6 = 3$.

MODEL THIS ON THE BOARD

FINDING THE MODE OF GAA SCORES

- 1 List the scores: 3, 5, 5, 5, 8.
- 2 Count how often each appears.
- 3 The mode is 5 because it appears three times.

DISCUSSION STARTER

REFLECT When you describe a data set, why can the range matter just as much as the average?

ANSWER KEY

Scaffold: visual check on the page

Q1: 10

Q2: 16

Q3: 3

Q4: 6

a) **Sometimes** — It is often better but not always the only choice.

b) **Never** — It can have one, more than one or none.

c) **Always** — The range uses the largest and smallest so an outlier changes it.

d) **Sometimes** — Only if the outlier matches the mode or creates a new one.

EXTENSION SHEET · STRETCH ANSWERS

S1: 9

S2: 143

S3: 157

S4: 136

S5: 23