

Acquire data sets for discrete and continuous numerical variables and...

acquire data sets for discrete and continuous numerical variables and calculate the range, median, mean and mode; make and justify decisions about which measures of central tendency provide useful insights into the nature of the distribution of data

Learning intention

- acquire data sets for discrete and continuous numerical variables and calculate the range, median, mean and mode; make and justify decisions about which measures of central...

Teach and model

- understanding that summarising data by calculating measures of centre can help make sense of the data, commenting on skewness or symmetry of data and the use...
- comparing the mean, median, mode and range of displays of data from a given context, and explaining how outliers may affect summary statistics
- recognising how different data sets can have the same measures of central tendency and experimenting with how varying data affects these measures

Check understanding

- Explain the main idea in acquire data sets for discrete and continuous numerical variables and... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.