Statistics

FINAL EXAM REVIEW SHEETS / 8 pages / 16 worked ideas

01 DESCRIBE THE DATA

Check shape and outliers before selecting center or spread.

Sample mean

RULE

$$\bar{x} = \frac{\sum x_i}{n}$$

DECISION CUE / TRAP

Numeric center; sensitive to outliers.

TRY IT

$x = (2, 4, 6, 8)$

WORKED STEP

$$\bar{x} = (2 + 4 + 6 + 8)/4 = 5$$

COVER & RECALL / REDO THE EXAMPLE WITHOUT LOOKING

Sample variance

RULE

$$s^2 = \frac{\sum (x_i - \bar{x})^2}{n - 1}$$

DECISION CUE / TRAP

Divide by one fewer than the sample size.

TRY IT

$x = (2, 4, 6)$

WORKED STEP

$$\bar{x} = 4; \quad s^2 = (4 + 0 + 4)/2 = 4$$

COVER & RECALL / REDO THE EXAMPLE WITHOUT LOOKING

SAMPLE

Watermarked sample - full pack has 8 pages and 16 worked ideas