Understand the mean and the sample standard-deviation formula.

Key knowledge | Free preview

Learning target: Understand the mean and the sample standard-deviation formula.

The sample standard deviation measures spread about the mean in the original units. First subtract the mean, square those deviations, sum them and divide by one less than the sample size before taking a square root. Translation changes location without changing spread; multiplying all values rescales the standard deviation.

Try the mathematics

Task 1. The sample is 4, 6, 8. Calculate its mean, sample variance and sample standard deviation, showing each squared deviation.

Continue with the full worksheet

The complete resource has 2 focused task sets and substantive worked solutions. Use an exercise book or print the A4 worksheet. This preview shows the first task without its full solution.

Find this resource: https://resources.aspiretopowerlearning.com.au/vce/skills/aspire-internal-gm-u1-o1-aos1-kk-04/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Unit 1; Outcome 1; Key knowledge; Investigating and comparing data distributions; bullet 4; p. 30.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u1-o1-aos1-kk-04. This is an internal identifier, not an official VCAA code.

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