WACE Mathematics Methods Formula Sheet

Original worked revision examples with notes on units and assumptions.

Use the board PDF below for the official sheet. Coverage of examples varies by subject.

Official reference material

SCSA Mathematics Methods 2026 formula sheet

What to work out beyond the sheet

State the event and distribution before substituting. The mean describes a long-run average, which can be fractional.

Formulas and worked examples

Calculus · chain rule

Formula or reference: Differentiate the outer function at the inner value, then multiply by the derivative of the inner function.

Units and conditions: Both functions must be differentiable at the relevant inputs.

Worked example: For $y = (2x + 1)^4$, $y' = 8(2x + 1)^3$. At $x = 1$ the gradient is 216.

Probability · binomial mean and variance

Formula or reference: $E(X) = np$ and $\mathrm{Var}(X) = np(1 - p)$.

Units and conditions: n independent trials share the same probability p.

Worked example: For five trials with $p = 0.30$, the mean is 1.5 and the variance is 1.05.