IB Maths AA SL: syllabus checklist

38 points in plain English, grouped by the five syllabus topics.

Tick a box only when you can do that point without notes. Every point has free notes and practice questions at **ibmathrevision.com/syllabus/ib-maths-aa-sl**, where your ticks are also saved.

Topic 1 Number and algebra

- ☐ Arithmetic sequences and series
- ☐ Geometric sequences and series (finite + infinite)
- ☐ Sigma notation
- ☐ Exponentials and logarithms — laws of logs
- ☐ Change of base formula
- ☐ Binomial theorem (positive integer n)
- ☐ Financial math (compound interest, annuities)
- ☐ Proof (deductive, direct)

Topic 2 Functions

- ☐ Function notation, domain, range, inverse
- ☐ Composite functions
- ☐ Transformations of graphs
- ☐ Quadratic functions: forms, discriminant
- ☐ Rational and reciprocal functions
- ☐ Exponential and logarithmic functions
- ☐ Equations of straight lines
- ☐ Solving equations analytically and graphically

Topic 3 Geometry and trigonometry

- ☐ Right-angled trigonometry
- ☐ Non-right triangles (sine + cosine rule)
- ☐ Radians and arc length / sector area
- ☐ Unit circle and exact values
- ☐ Trig identities (Pythagorean, double-angle)
- ☐ Solving trigonometric equations
- ☐ Graphs of sin, cos, tan (transformations)

Topic 4 Statistics and probability

- ☐ Presentation of data
- ☐ Measures of central tendency + spread
- ☐ Bivariate data and correlation
- ☐ Sample space, complementary events
- ☐ Independent + mutually exclusive events
- ☐ Conditional probability (incl. tree diagrams)
- ☐ Discrete random variables and $E(X)$
- ☐ Binomial and normal distributions

Topic 5 Calculus

- ☐ Limits and rates of change
- ☐ Differentiation: chain, product, quotient rules
- ☐ Second derivative, concavity, inflection
- ☐ Optimisation and related rates
- ☐ Integration by inspection and substitution
- ☐ Definite integrals and area between curves
- ☐ Kinematics: displacement, velocity, acceleration

This checklist is written in our own words by IB Math Revision. It is not the official subject guide: always check the International Baccalaureate (IB)'s own document.