



G3 Additional Mathematics (A-Math) - Secondary 3

A 2-page checklist + study system (built on SEAB 4049 and MOE Full SBB).

How to use this PDF

Tick boxes weekly. Keep an error log. Fix gaps early - Sec 3 is the best 'compounding' year for A-Math.

What is G3 A-Math (in Full SBB)?

Full Subject-Based Banding (Full SBB) lets students take subjects at different levels (G1/G2/G3). G3 Additional Mathematics is the higher-rigor A-Math option, typically starting in Sec 3 for students with strong Mathematics foundations.

What A-Math adds	Advanced algebra + deeper trigonometry + the calculus toolkit (differentiation & integration).
What SEAB emphasises	Problem-solving and reasoning - not rote steps.
Why parents consider tuition	The pace jumps. Small gaps in algebra become big losses in calculus and multi-step questions.

SEAB O-Level Additional Mathematics (4049) - the essentials

Strands	Algebra • Geometry & Trigonometry • Calculus
AO weightings	AO1 Techniques 35% • AO2 Problems in context 50% • AO3 Reasoning 15%
Exam format	2 papers (2 h 15 min each), all questions compulsory. Approved calculator allowed.

High-yield topic map (master these first)

Algebra	Geometry & Trigonometry	Calculus
<ul style="list-style-type: none">Quadratic functions (max/min, intersections)Surds & indices (accuracy)Polynomials & partial fractionsBinomial expansionExponential & logarithmic functions	<ul style="list-style-type: none">Trig graphs & equations in intervalsTrig identities (prove + simplify)Coordinate geometry (lines, circles)Proofs in plane geometry	<ul style="list-style-type: none">Differentiation rules + applicationsStationary points (max/min, tangents)Integration (area) + kinematics

6-item readiness check (quick, honest)

- ☐ I can factorise/simplify without sign errors (brackets, fractions, indices).
- ☐ I can sketch and use graphs (quadratic, reciprocal, exp/log) to solve.
- ☐ I can handle trig identities and solve trig equations in an interval.
- ☐ I can differentiate standard forms + apply max/min and tangents.
- ☐ I can integrate basic forms and interpret definite integrals as area.
- ☐ I practise timed work weekly and review every mistake.



Why have tuition for G3 A-Math?

A-Math rewards a tight foundation and an exam system. Tuition works when it builds both - fast.

Foundation repair (fast)	Fix the 3 core weaknesses that block A1: algebra accuracy, graph sense, and method choice.
First-principles teaching	You learn why a method works, so unfamiliar questions stop feeling 'impossible'.
Exam systems	Question triage, time splits, clean working, and an error-proofing routine.
Feedback loop	Small group/1-to-1 corrections, with an error log that turns mistakes into a personal syllabus.

Bukit Timah Tutor approach (simple & premium)

Maximum 3 students per class. We diagnose first, teach from first principles, then drill with timed practice until the method is automatic.

10-week improvement plan (parents can follow)

- [] **Weeks 1-2:** Algebra reset (quadratics, surds, indices). Accuracy > speed.
- [] **Weeks 3-4:** Polynomials/partial fractions + logs/exp. Build 'clean working' habits.
- [] **Weeks 5-6:** Trigonometry (identities + equations). One timed section weekly.
- [] **Weeks 7-8:** Differentiation (applications). Stationary points, tangents, rates.
- [] **Weeks 9-10:** Integration (area + kinematics) + 2 timed papers + full corrections.

Exam-day checklist (O-Level style)

- [] Bring an approved calculator + spare batteries. Know your fraction/solve/table functions.
- [] Do a 30-second scan; plan time around the highest-mark questions.
- [] Write one step per line. Box results you reuse. Avoid messy algebra.
- [] If stuck: write the target equation, try a substitution/identity/graph idea, then move on.
- [] Reserve the final 8-10 minutes for error-hunting (signs, intervals, arithmetic).

Call / WhatsApp +65 8823 1234 for a G3 A-Math diagnostic.

Source article:

<https://bukittimahtutor.com/additional-math-syllabus-tutor-g3-secondary-3-secondary-additional-mathematics-tuition-for-singapore/>

Sources: SEAB 4049 (2026) Additional Mathematics syllabus; MOE Full SBB pages; MOE G2/G3 Additional Mathematics syllabuses (2020).