

AQA Level 2 Certificate in Further Maths

Information for Parents and Pupils

What the board says:

The AQA Level 2 Certificate in Further Maths places an emphasis on higher order technical proficiency, rigorous argument and problem-solving skills. It gives high achieving students an introduction to AS level topics that will help them to develop skills in:

- ▶ Algebra
- ▶ Geometry
- ▶ Calculus
- ▶ Matrices
- ▶ Trigonometry
- ▶ Functions
- ▶ Graphs.

Assessment is linear: paper 1, the written paper (non-calculator) carries 50 per cent of marks and paper 2, written paper (calculator) carries 50 per cent of marks.

This qualification is suitable for students who already have or are expected to get grades 7-9 in GCSE Mathematics and who are likely to progress to A-level study in Mathematics and possibly Further Mathematics.

Course content...

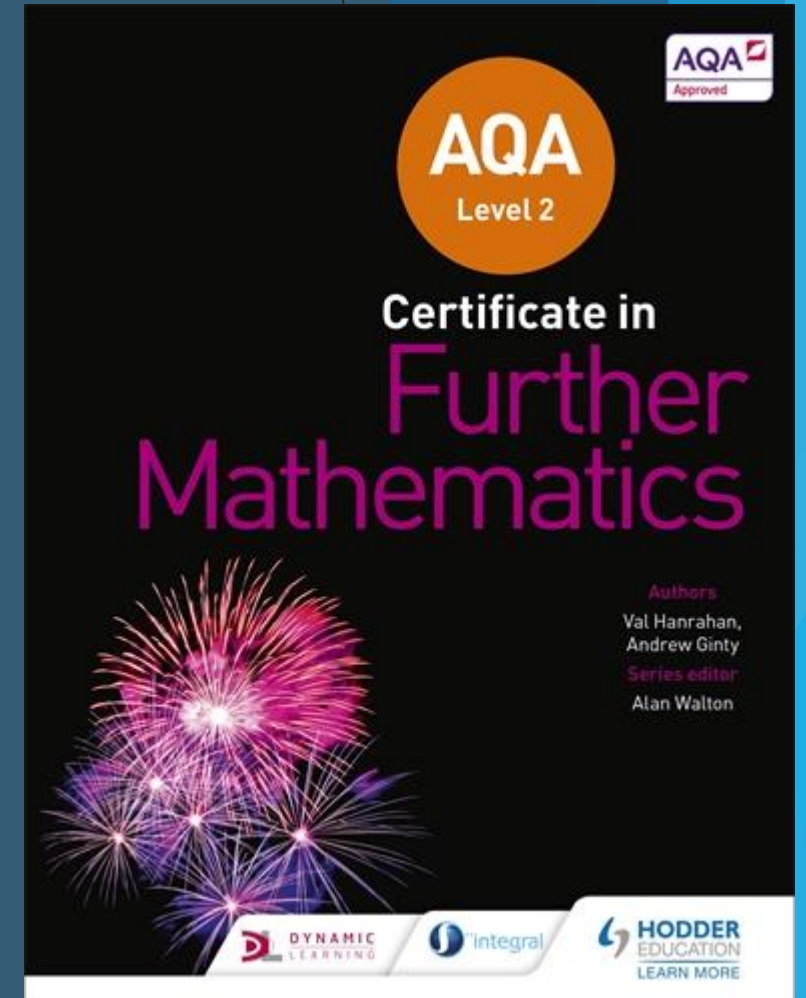
- ▶ Number - Fractions, Decimals, Percentage, Proportion, Ratio, Surds, Product rule for counting.
- ▶ Algebra - Functions, Expanding and Factorising, Algebraic fractions, Formulae, Factor Theorem, Binomial Expansion, Completing the square, Graph sketching, Solving Equations, Simultaneous equations (up to 3 unknowns), Inequalities (including more complicated quadratic inequalities), Indices, Proof, Sequences (including limit as n tends to infinity).
- ▶ Coordinate Geometry - Straight lines, Circles.
- ▶ Calculus - Understand differentiation and gradients in terms of rates of change, Differentiate polynomial functions, find equations of tangents and normals, find stationary points, sketch curves using stationary points, second order differentiation.
- ▶ Matrices - Multiply 2×1 and 2×2 matrices, understand the identity matrix, transform the unit square using matrices.
- ▶ Geometry - Angle properties, Area, Perimeter, Circumference, Volume, Geometric proof, Trigonometry, Pythagoras's Theorem, Trigonometric graphs.

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Delivery

- ▶ The extra parts of the course will be delivered in a 75 minute each week after school on Friday starting at 3:15 pm, along with homework.
- ▶ Pupils will be required to purchase and bring a textbook
- ▶ We will also make revision guides available to purchase alongside GCSE materials in Year 11.



Grading

- ▶ Possible grades awarded: 5 to 9. Below 5 there is an allowed grade of a 4. If a pupil scores below grade 4 they will receive a U.
- ▶ Out of a scaled score of 160 (80 on non-calculator and 80 on calculator) grades for last 6 years prior to 2020 have been awarded at:

	2019	2018	2017	2016	2015	2014	Average %
A [^]	85.7	85.7	85.1	84.6	80.0	82.3	83.9
A*	70.3	69.1	67.4	66.9	63.4	65.1	67.0
A	54.9	52.6	50.3	49.1	46.9	48.6	50.4
B	40.6	37.7	35.4	34.8	34.3	34.3	36.2
C	26.3	22.9	20.6	21.1	22.3	20.6	22.3

Exam dates and fees

- ▶ The provisional timetable for Summer 2023 has not yet been released but Further Maths is typically after all other GCSEs sat at Brockington.
- ▶ There are no fees for entry to the exam, however if a pupil withdraws from the exam then fees may be payable.

Signing up

- ▶ Pupils should see/email me personally to inform that they wish to join the class for next year.
- ▶ Their in-school email address will be added to a mailing list which will be used to inform of any deadlines approaching and communicate changes to any sessions.
- ▶ I will send a test email to the mailing list on Monday 4th July; if the pupil doesn't receive an email in their school email inbox on this day then they haven't signed up. This email will include a link to the text book and a copy of the prep-homework.
- ▶ A register will be kept and attendance issues dealt with as per any other lesson.
- ▶ In January pupils will be given the choice whether they wish to be entered for the exam; those that indicate they do will be given further details.

Questions

- ▶ Any now?
- ▶ If not then email pgm@brockington.leics.sch.uk
- ▶ Also visit <http://www.aqa.org.uk/subjects/mathematics/aqa-certificate/further-mathematics-8365>