

How to get a grade 5 in GCSE Maths Higher (Edexcel)

A grade 5, the “strong pass”, on Higher tier means being reliable on the grade 4 and 5 questions that fill roughly the first half of each paper, and picking up the first marks on the harder questions after that. You do not need to finish every paper. Accurate, well-set-out answers to standard questions matter far more than attempting the last three questions.

What a grade 5 asks of you

- Standard methods you can carry out correctly every time, both with and without a calculator.
- Most of your marks come from the first half of each paper, plus the first one or two marks on later questions.
- Clear working: method and process marks add up quickly, even when a final answer is wrong.
- Being able to explain simple reasoning, such as giving angle reasons or comparing two sets of data.
- If you are working at grade 4 and 5 and finding Higher papers a struggle, talk to your teacher about tier: Foundation also goes up to grade 5 and has more questions at that level.

Topics to secure first

- Number: fractions and mixed numbers, percentages (increase, decrease, percentage change, reverse percentages, compound interest and depreciation), standard form, index laws, prime factors with HCF and LCM, estimation and error intervals.
- Algebra: expanding and factorising (including quadratics like $x^2 + 5x + 6$), solving linear equations and inequalities, changing the subject, simultaneous linear equations, the n th term of a linear sequence, straight-line graphs and $y = mx + c$.
- Ratio: sharing in a ratio, ratio and fractions, best buys, speed, density and pressure, direct proportion, converting units.
- Geometry: angles in parallel lines and polygons, area and perimeter including circles, volume of prisms and cylinders, Pythagoras, right-angled trigonometry, transformations, bearings, constructions and loci, plans and elevations, lengths in similar shapes.
- Probability and statistics: probability rules, relative frequency, tree diagrams for independent events, Venn diagrams, averages from frequency tables, scatter graphs, cumulative frequency and box plots.

Question types to get right

- Every 1 and 2 mark question in the first half of the paper. These are the marks a grade 5 is built on.
- Money and percentage problems with a decision at the end (“Which shop is cheaper?”). Show each step and finish with the decision and the figures.
- Angle questions with reasons, using the proper names of the facts.
- Drawing a quadratic graph from a table of values and reading solutions from it.
- Non-calculator arithmetic with fractions, decimals and percentages on Paper 1.
- The first part of any longer question: write the first calculation even if you cannot see the whole route.

Revision week by week (10 weeks)

- Aim for four or five sessions a week of 30 to 45 minutes, plus the Daily 5 every day.
- Week 1: sit the Paper 1 and Paper 2 mock exams on this site, timed. Open Progress and write down your five weakest subtopics.
- Weeks 2 and 3: number and ratio. For each weak subtopic, read the notes, do the worksheet and check the answers, then build a 10 to 15 mark custom paper on Easy, then Medium.
- Weeks 4 and 5: algebra, in the same way: notes, worksheet, then custom papers.
- Weeks 6 and 7: geometry and measures, with extra time on Pythagoras, trigonometry, area and volume.
- Week 8: probability and statistics, then sit the Paper 3 mock exam.
- Week 9: redo every question you dropped marks on from Progress, and sit one full past paper from Pearson (your teacher can give you recent ones).
- Week 10: mixed Medium custom papers, your mistakes list, the formulae sheet and the exam technique guide. Tick off the grade 4 and 5 checklist.

How to use this website

- Notes: use the grade-by-grade skill lists and tick every grade 4 and 5 skill on the checklist. Anything you cannot tick becomes a subtopic to revise.
- For each subtopic, read the notes and the cheatsheet, then do the worksheet and mark it with the answers.
- Custom paper: pick two or three subtopics and a length of 15 to 20 marks. Start on Easy, then move to Medium (around grades 4 to 6) once you score around 80%. Read the mark scheme for every mark you drop.
- Mock exams: sit one timed paper every two to three weeks, rotating Paper 1 (non-calculator) and Papers 2 and 3.
- Daily 5: five questions a day from your weakest topics. Keep the streak going; ten minutes a day adds up.
- Flashcards: a few minutes of quick-fire questions to keep key facts and one-step skills sharp.
- Progress: shows your scores by subtopic, weakest first. Redo the questions you dropped marks on until you get them right. Use the Whiteboard to work on screen.
- If a topic still will not click, book a free 30-minute trial lesson with Chhetri Academy for 1-to-1 help.

Timing strategy in the exam

- Spend most of your time where your marks are: take about 45 to 50 minutes over the first half of the paper, working carefully and checking each answer as you go.
- Then go through the rest of the paper. Answer anything you recognise, and write the first step of every other question.
- Do not spend more than 5 minutes stuck on one of the final questions. A blank grade 8 question costs you little; a rushed grade 4 question costs you a lot.
- Use the last 10 minutes to check the first half of the paper again, because that is where your grade 5 comes from.

Traps at grade 5

- Arithmetic slips on Paper 1: check each calculation with a rough estimate or the inverse operation.
- Reverse percentages: if £68 is the price after a 15% reduction, divide by 0.85. Do not take 15% off £68.
- Percentage change: divide the change by the original amount, not the new one.
- Mean from a frequency table: divide by the total frequency, not by the number of rows, and use midpoints for grouped data.
- Using the diameter instead of the radius in circle formulae, or mixing up area and circumference.
- Calculator not in degrees, or rounding in the middle of a calculation.
- Writing “yes” or “no” without figures in a decision question, or angle reasons such as “Z angles”.
- Leaving questions blank: always write a first step.

Free notes, worksheets, practice papers and mock exams at chhetriacademy.com. Written for this site; not taken from past papers.
Stuck? 1-to-1 tutoring with a free 30-minute trial lesson.