

A Level Maths – Exam Technique

A collage of mathematical formulas on a chalkboard background. The formulas include:

- $Var(X) = E(X^2) - (E(X))^2$
- $A = \pi r^2$
- $E(X) = \sum xP(X = x)$
- $S_n = \frac{n}{2}[2a + (n - 1)d]$
- $sec^2 x = 1 + tan^2 x$
- $S_{xx} = \sum x^2 - \frac{(\sum x)^2}{n}$
- $y \approx \frac{h}{2}(y_0 + y_n + 2(y_1 + y_2 + \dots + y_{n-1}))$
- $uv - \int v \frac{du}{dx} dx$
- $u \frac{dv}{dx} + v \frac{du}{dx}$
- $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Revise Smart

- **Do as much revision as possible** – be realistic and plan for ALL exams – don't favour the subjects you prefer
- **Learn the right things** – do loads of past papers/problems¹ (at least 70% of study time) (www.mathsgeeks.co.uk/pastpapers.html)
- **Learn what you don't know** – don't repeatedly do questions you can answer but find the ones you can't and ASK for help²
- **Exam conditions** – do past papers in exam conditions to increase familiarity of timings

Just before the Exam

- Get an early night the night before, arrive early and be positive
- Get your equipment together well in advance³ (black or blue pen + a spare, pencil, rubber, Scientific Calculator (all in a clear bag).
- Have your *'Everything You Need to Know'* guide to read outside exam room.

In the Exam

- **Read the question** carefully this is the BIGGEST mark loser, don't assume you know what they want. Read and answer each section in turn, do not jump ahead
- **Always show working** – there are usually more marks for working than the actual answer. Assume the question 'explain your answer' is on every question
- **Look at the number of marks** – this tells you how much you need to do, the more marks the more working required
- **Look at the answer** – if the answer (or working) is extremely complicated it is probably wrong so start again
- **Calculator** – always it's in the right function (degrees or radians)
- **Hence or Otherwise...** - for these questions it is always hence i.e. use the first part/parts of the question

¹ If there are no papers available ask someone who knows the syllabus to write some questions for you. You could always ask us at MathsGeeks!

² We are always happy to help on our Facebook page.

³ If you need equipment in the exam that you don't have – put your hand up and ask.

- **Be Neat** - don't squash your work and write neatly – you don't want to make it difficult for the examiner to find you marks
- **Round off your answers** to the correct level (e.g. 2.d.p or 3.s.f)
- **Start with easy questions** to build up as many marks as possible and your confidence.
- **Mistakes:** Cross out mistakes do not overwrite

Can't do a question

- Start with what you know – can you get some of the marks?
- Draw a diagram/graph/table (where possible)
- Look at the formulas
- Can you work backwards?
- Leave it and go on to the next question and come back if there is time

Time to spare?

- Read all questions and check there is answer for each part
- For each question check
 - your answers actually answer the question
 - you've included the units
- Go back to unfinished questions
 - now is the time to guess if you haven't written anything
- Still time to spare....re-do the questions from scratch that you were unsure about

End of the exam

- Well done you are through - now focus on what you did WELL!