

Leaving Cert Higher Maths Paper 1.

The best kept secret (not for long) on Paper 1.

Most teachers advise their students to attempt the following questions on Paper 1 they are 1,2,3,6,7,8, i.e. **first three and last three**! This is fine and is in general sound advice but have you noticed that the part c's of these popular questions are always **the most difficult questions** on the paper and as a result ultimately determine the destination of the A1's and A2 's.

The reasons why Q4 and Q5 are not popular.

(a) A lot of the material in these questions is covered in 5th year when many students have not fully come to grips with Higher maths (trigonometry suffers also).

(b) Many students find Induction difficult and as this is always asked in Q5, many students will avoid Q5 for this reason.

Why you should do Q4, or Q5.

Q4

This is basically a sequences and Series question, so to do this question you must know how to find the U_n and S_n of an AP, a GP an APGP, and a telescopic series. This just involves learning (i) The properties of these series and (ii) a few formulae. A few hours work with plenty of practice on the exam papers will be very rewarding.

Q5

This has had the same format for the last 5 years.

Binomial Theorem, Logs, Proof by Induction and Algebra.

All of which are do-able and very predictable, if you have problems with induction, take a look at our [induction file](#). Some students have a difficulty with logs, this in some cases is a carry over from a bad experience at Junior Cert, and Give Logs a bit of work and all will be resolved.

Topics not on the Course

(1) Complex Numbers

(I) Properties of the Modulus are not on the course

(2) Differential Calculus

(i) Problems involving modelling ie max and min questions applied to problems

Based on given diagrams, similarly for rates of change. **Note** only certain functions can be asked in the from first principals section (see "must know file")

(3) Integral Calculus

(i) Integrals involving partial fractions not on the course.

(ii) In volumes of rotation only cones and spheres can be asked.