

LeavingCert Maths higher Level Paper 2

Topics not on the course

Coordinate Geometry of the Line

- (i) The equations of the Bisectors of an Angle
- (ii) The In centre of a Triangle

Coordinate Geometry of the Circle

- (i) Orthogonal Circles
- (ii) Systems of Circles and transformation techniques.

Trigonometry

- (i) Period and range of functions in the form $a \pm b \sin kx, a \pm b \cos kx$.

You can only be asked to find the Period and Range of a given graph of a function on a scaled diagram, but not in the trigonometry section.

- (ii) Trigonometric equations of the form $a \sin x \pm b \cos x = k$
- (iii) Composition of inverse Trig functions ie $\sin(\cos^{-1}(\frac{a}{b}))$
- (iv) The proof of $\lim_{x \rightarrow 0} \frac{\sin x}{x}$ is not required.
- (v) The Proof of $\tan^{-1} x + \tan^{-1} y = \tan^{-1}(\frac{x+y}{1-xy}), [xy < 1]$ is not required

Permutations/Combinations

(i) Arrangements or combinations where repetitions are involved for example arranging the letters of the word "Composition " as it has 3o's, and 2 i's .

The Calculus Option

(i) Integration by parts is confined to 2 steps only (as $e^x \sin x$).

(ii) The Ratio test is confined to series of the form $\sum_{n=0}^{\infty} a_n x^n$