

## **Using your tables book (Leaving Certificate)**

## Some notes:

- You need to be familiar with the layout of the book and where to find each formula
- Don't get confused by the Irish Language on the left hand side of each page
- Learn which pages the sections you will need are on, or at least what to look for in the "Contents" page
- You need to know how to use each formula that you are going to use, not just where they are
- For quadratic equations, the "-b" formula is on the front cover!
- Don't make up your own formulas!

## Paper 1:

Question/Section	Name of Formula	Picture	Page
Arithmetic/Money	Compound Interest	tampaitic an alirgoadals  In see a leana, is e' an fad ama ina bhlianta a see a leana, is e' a na fad ama ina bhlianta a see a leana, is e' selointe mar dheachúil nó mar chodia (ionas seasann i - o 8d orian 8%, mar shampla)*.  In all of the following, f is the time in years and in annual rate of interest, deprecation or growth, example, f ionath and research and a decident of fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath and the season as a decimal or fraction (so that, for example, f ionath value, f ionath and the season as a decimal or fraction (so that, for example, f ionath value, f ionath va	30 (Financial Mathematics)
Sequences/Series Formulae	Sequences/Series Formulae	himh agus sraitheanna , an nú téarma iontu sep, agus is é m na chéad n tearma.  eamh combhhreise  an chéad téarma, agus an chombhreis $S_a = \frac{\pi}{2}[2a + (n-1)d]$ seamh iolraíoch nó h iolraíoch $T_a = ar^{n-1}$ an chéad téarma, agus $S_a = \frac{\pi}{1-r}$ an chéad téarma, agus $S_a = \frac{\pi}{1-r}$ seamh iolraíoch nó h iolraíoch $S_a = \frac{\pi}{1-r}$ an chéad téarma, agus $S_a = \frac{\pi}{1-r}$ given $ r  < 1$	22 (Sequences and Series)
Calculus	Differentiation Formulae	ingh  Calculus  Derivatives  (1) $f'(x)$ $nx^{+1}$ $x = \frac{1}{x}$ $e^{x}$ $ac^{m}$ A chao $xx = -\sin x$ $1x = \cos x$ $1x = \sec^{2} x$ $\frac{x}{a} = \frac{1}{\sqrt{a^{2}-x^{2}}}$ $\frac{x}{a} = \frac{1}{a^{2}+x^{2}}$	25 (Calculus)

Paper 2:

Section(s)	Name of Formula	Picture	Page
Geometry /		anacht an triantáin Trigonometry of the triangle	16
Trigonometry		C A b	(Trigonometry)
		$rac{1}{2}ab\sin C$ area	
		n tsinis $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$ sine rule	
		in chombishins $a^2 = b^2 + c^2 - 2bc \cos A$ cosine rule	
		tán dronuilleach Right-angled triangle	
		A 6	
		$\sin A = \frac{a}{c} \qquad \cos A = \frac{b}{c}$ on Phiotographia $c^2 = a^2 + b^2$ Pythaevan' theorem	
		n rmonagaras c' = a' + b' Pythagoras' theorem	
Co-ordinate		seata chomhordanáideach Co-ordinate geometry	18 (Co-ordinate
Geometry		$(0,c)$ $P(x_1,y_1)$ Line	Geometry)
		$O$ $Q(x_1, y_1)$	
		$2   m = \frac{y_2 - y_1}{x_2 - x_1}   slope of PQ$	
		[PQ] = $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ length of [PQ]	
		since $[PQ]$ $\left(\frac{y_1+y_2}{2}, \frac{y_1+y_2}{2}\right)$ midpoint of $[PQ]$	
		which $PQ$ $y = y_1 = m(x - x_1)$ equation of $PQ$ $y = mx + c$	
		an triantile $OPQ$ $\frac{1}{2}[x_1y_2 - x_2y_2]$ area of triangle $OPQ$ area of triangle $OPQ$ $\frac{bx_1 + ax_2}{bx_2}$ point dividing $[PQ]$ area of triangle $OPQ$ area of triangle $OPQ$ $\frac{bx_1 + ax_2}{bx_2}$ $\frac{by_1 + ay_2}{bx_2}$ in the print $\frac{ax_2}{bx_2}$	
		a nonmean $[PQ]$ inheas $a:b$ $ \begin{pmatrix} ht_1+au_2 \\ b+a \end{pmatrix} \begin{array}{c} by_1+ay_2 \\ b+a \end{pmatrix} $ point dividing $[PQ]$ in the ratio $a:b$	
		-H-	
Length Area	Area / Volume of	on A icotu seo a leanas ar as fionach atá i gceist.  The following, A represents the area of the shape in question.	8 (Length and
Volume	different shapes	of the Brotech star i goess.  Some star of the star of the Brotech star of the Brotec	Area)
		$\frac{a}{a}$ = $ab \sin C$	
		b	
		peisiam $A = \left(\frac{a+b}{2}\right)h$ Trapezium	
		9	
		cal / Diosca	
		length / (circumference )	
		o but travellou sout more and	
		ann A iontu seo d'achar cuar  unchi agus seasam l'do thoirt  daid atu specie.  the volume of the solid in question  the volume of the solid in question	
			10 (Surface Area
		this $A = 2\pi rh$ Cylinder $V = \pi r^2 h$	and Volume)
			and volume,
		$A = \pi r^{2}$ $V = \frac{1}{2}\pi r^{2}h$ Cone	
		$A = 4\pi r^2$ Sphere	
		ξ' = <sup>4</sup> / <sub>3</sub> πr <sup>3</sup>	
		-10-	
		A transported on unit only  A represents the area of the slage.	
	Trapezoidal Rule	nm A d'achar na fiorach.  A represents the area of the shape.	12 (Area
			Approximations)
		y <sub>1</sub> y <sub>2</sub> y <sub>3</sub> y <sub>4</sub> y <sub>6</sub>	
		<u> </u>	
		ipėssėldesch $A = \frac{h}{2} \left[ y_1 + y_n + 2(y_2 + y_3 + y_4 + \dots + y_{n-1}) \right]$ Trapezoidai ruk	
		<b>4 Simpson</b> $A \approx \frac{h}{3} [y_1 + y_4 + 2(y_2 + y_3 + \dots + y_{n-2}) + 4(y_2 + y_4 + \dots + y_{n-1})]$ Simpson's rule	
		a coordinate $n = \frac{3^{(1)}}{3^{(2)}} \frac{y_2 - y_3 + y_3 + y_4 - y_4 + y_4 + y_4 + y_4 + y_4 + y_4}{3^{(2)}}$ for odd $n$	
		·n·	
		the travelled. On that day	