

## Year 10 - Mathematics 5.2 Course 2024

TERM 1		
TIMING	UNIT OVERVIEW	ASSESSMENT
Weeks: 4	<b>Financial Maths</b> Earning an income, income tax, simple interest, compound interest, compound interest formula, term payments, depreciation.	Task Number: 1  Nature of Task: In class written task
Weeks: 4	<b>Algebraic Expressions and Indices</b> Index laws, 4 operations of algebraic fractions, expanding/factorising expressions and binomial products, factorising monic quadratic expressions.	Percentage: 20%  Week: 10
Weeks: 3	<b>Measurement</b> Area of composite shapes, Surface Area of Prisms, Cylinders and Composite Solids, Volume of Prisms and Cylinders, Capacity conversions.	Reported: Semester 1
TERM 2		
TIMING	UNIT OVERVIEW	ASSESSMENT
Weeks: 3	<b>Trigonometry</b> Year 9 review: Pythagoras' theorem, trigonometric ratios, finding unknown sides and angles, angles of elevation and depression, bearings, simple problems involving bearings.	Task Number: 2  Nature of Task: In class written task
Weeks: 4	<b>Equations, Formulas and Inequalities</b> 2 step equations review, equations with algebraic fractions, monic quadratic equations, equation problems, equations and formulas, graphing inequalities, solving inequalities.	Percentage: 25%  Week: 7
Weeks: 3	<b>Data</b> Shape of frequency distribution, quartiles, interquartile range, box plots, parallel box plots, comparing data sets, scatter plots, bivariate data involving time, statistics in the media	Reported: Semester 1

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TERM 3		
TIMING	UNIT OVERVIEW	ASSESSMENT
Weeks: 2.5	<b>Coordinate Geometry</b> Length, midpoint, gradient of an interval, parallel and perpendicular lines, graphing linear equations, gradient-intercept and general form, finding equation of a line, equations of parallel/perpendicular lines.	Task Number: 3  Nature of Task: In class writtern task  Percentage: 25%  Week: 6  Reported: Semester 2
Weeks: 2	<b>Simultaneous Equations</b> Solving simple simultaneous equations graphically and algebraically	
Weeks: 2.5	<b>Probability</b> Review basics of probability, relative frequency, Venn diagrams, two-way tables, 2 and 3 step experiments, selecting with/without replacement using tree diagrams, dependent/independent events, conditional probability using notation	
Weeks: 3	<b>Geometrical Figures</b> Review angles on parallel lines, angle properties for triangles and quadrilaterals. Angle sum of polygons, exterior angle sum, congruent triangles proofs, proving properties of triangles and quadrilaterals, similar figures, finding unknown lengths in similar figures, tests for similar triangles	
TERM 4		
TIMING	UNIT OVERVIEW	ASSESSMENT
Weeks: 3	<b>Graphing curves</b> Direct proportion, inverse proportion, conversion graphs, parabola, exponential curve, the circle, identifying graphs	Task Number: 4  Nature of Task: In class written task  Percentage: 30%  Week: 3  Reported: Semester 2
Weeks: 3	<b>Further Trigonometry</b> Right-angled trigonometry, bearings, trigonometric equations, Sine rule, cosine rule, area of triangle.	
Weeks: 2	<b>Beyond year 10 programs / Work experience</b> Students completing mandatory "all my own work", resume writing and other skills for work. Work experience	
Weeks: 2	<b>Preparation for Year 11</b> Expanding and Factorising quadratic equations P & S, completing square, quadratic formula, quadratic equation problems, exploring graphs of parabolas	