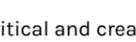
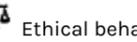


Year 10 – Australian Curriculum: Mathematics

Identify curriculum	Achievement standard	<p>By the end of Year 10, students recognise the connection between simple and compound interest. They solve problems involving linear equations and inequalities. They make the connections between algebraic and graphical representations of relations. Students solve surface area and volume problems relating to composite solids. They recognise the relationships between parallel and perpendicular lines. Students apply deductive reasoning to proofs and numerical exercises involving plane shapes. They compare data sets by referring to the shapes of the various data displays. They describe bivariate data where the independent variable is time. Students describe statistical relationships between two continuous variables. They evaluate statistical reports.</p> <p>Students expand binomial expressions and factorise monic quadratic expressions. They find unknown values after substitution into formulas. They perform the four operations with simple algebraic fractions. Students solve simple quadratic equations and pairs of simultaneous equations. They use triangle and angle properties to prove congruence and similarity. Students use trigonometry to calculate unknown angles in right-angled triangles. Students list outcomes for multi-step chance experiments and assign probabilities for these experiments. They calculate quartiles and interquartile ranges.</p>							
Teaching and learning	Term overview	Term 1		Term 2		Term 3		Term 4	
	NUMBER AND ALGEBRA <ul style="list-style-type: none"> - Expand binomial expressions and factorise monic quadratic expressions. - Four operations with algebraic fractions - Solve simple quadratic and simultaneous equations - Algebraic and graphical representations of relations. (Sketch graphs of parabolas, circles and exponentials). 		NUMBER AND ALGEBRA <ul style="list-style-type: none"> - Coordinate Geometry - relationships between parallel and perpendicular lines - Linear equations and inequalities - Substitution using formulas - finding unknown values. NUMBER AND ALGEBRA <ul style="list-style-type: none"> - Coordinate Geometry - relationships between parallel and perpendicular lines - Linear equations and inequalities - Substitution using formulas - finding unknown values. 		FINANCIAL MATHEMATICS <ul style="list-style-type: none"> - Financial mathematics - connections between simple and compound Interest GEOMETRY <ul style="list-style-type: none"> - Congruence and similarity proofs using triangle and angle properties - Deductive reasoning to proofs and exercises involving plane shapes MEASUREMENT AND GEOMETRY <ul style="list-style-type: none"> - Surface area and volume to composite solids MEASUREMENT <ul style="list-style-type: none"> - Trigonometry to find angles in right-angled triangles 		STATISTICS <ul style="list-style-type: none"> - Compare data sets in various data displays - Calculate quartiles and interquartile ranges - Describe bivariate data using time as the independent variable - Describe relationships between two continuous variables - Evaluate statistical reports PROBABILITY <ul style="list-style-type: none"> - List outcomes and assign probabilities to multi-step chance experiments 		
General capabilities and Cross curriculum priorities									
		 Literacy  Numeracy  ICT capability  Critical and creative thinking  Ethical behaviour  Personal and social capability  Intercultural understanding  Aboriginal and Torres Strait Islander histories and cultures  Asia and Australia's engagement with Asia  Sustainability							
Develop assessment	Assessment	Term 1		Term 2		Term 3		Term 4	
		Week	Assessment instrument	Week	Assessment instrument	Week	Assessment instrument	Week	Assessment instrument
		5	Binomials and monic quadratic expressions Test	12	Substitution, Linear Equations and Inequalities Test	3	Financial Maths Assignment	12	Measurement Assignment
		7	Algebraic Fractions Test	15	Coordinate Geometry Test	7	Congruence and Similarity Test	15	Statistics Assignment
9	Solve simple quadratic and simultaneous equations Assignment	17	Graphical Representations of Relations Assignment	9	Trigonometry Test	17	Probability Assignment		
Make judgments and use feedback	Moderation	Term 1		Term 2		Term 3		Term 4	
Teachers moderate assessment tasks to ensure consistency of judgments.									