

Learning and Assessment Overview



MALANDA
STATE HIGH SCHOOL

Year 10 - 2024

Mathematics Extension

	Unit	Length	Topics/Concepts/Skills/Inquiry	Assessment	Checkpoints	Due Date
Term 1	Probability	4 weeks	Students list outcomes for multi-step chance experiments and assign probabilities for these experiments.	Exam	-	13/02/24
	Financial Mathematics	5 weeks	Students recognise the connection between simple and compound interest. They perform the four operations with simple algebraic fractions.	Exam	-	19/03/24
	Unit	Start/Length	Topics/Concepts/Skills/Inquiry	Assessment	Checkpoints	Due Date
Term 2	Pythagoras & Trigonometry	5 weeks	Students use trigonometry to calculate unknown angles in right-angled triangles.	Exam	-	11/06/24
	Measurement & Geometry	5 weeks	Students solve surface area and volume problems relating to composite solids. They apply deductive reasoning to proofs and numerical exercises involving plane shapes. Students use triangle and angle properties to prove congruence and similarity.			
	Unit	Start/Length	Topics/Concepts/Skills/Inquiry	Assessment	Checkpoints	Due Date
Term 3	Statistics	4 weeks	Students 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. Students calculate quartiles and inter-quartile ranges.	Assignment	Issue: 23/07/24 Final Checkpoint: 02/08/24	08/08/24
	Linear Relationships	5 weeks	Students solve problems involving linear equations and inequalities. They make the connections between algebraic and graphical representations of relations. Students recognise the relationships between parallel and perpendicular lines. They find unknown values after substitution into formulas. Students perform the four operations with simple algebraic fractions. They solve pairs of simultaneous equations.	Exam	-	03/09/24
	Unit	Start/Length	Topics/Concepts/Skills/Inquiry	Assessment	Checkpoints	Due Date
Term 4	Algebra & Non-Linear Relationships	8 weeks	Students make the connections between algebraic and graphical representations of relations. They expand binomial expressions and factorise monic quadratic expressions. Students find unknown values after substitution into formulas. They solve simple quadratic equations	Exam	-	13/11/24