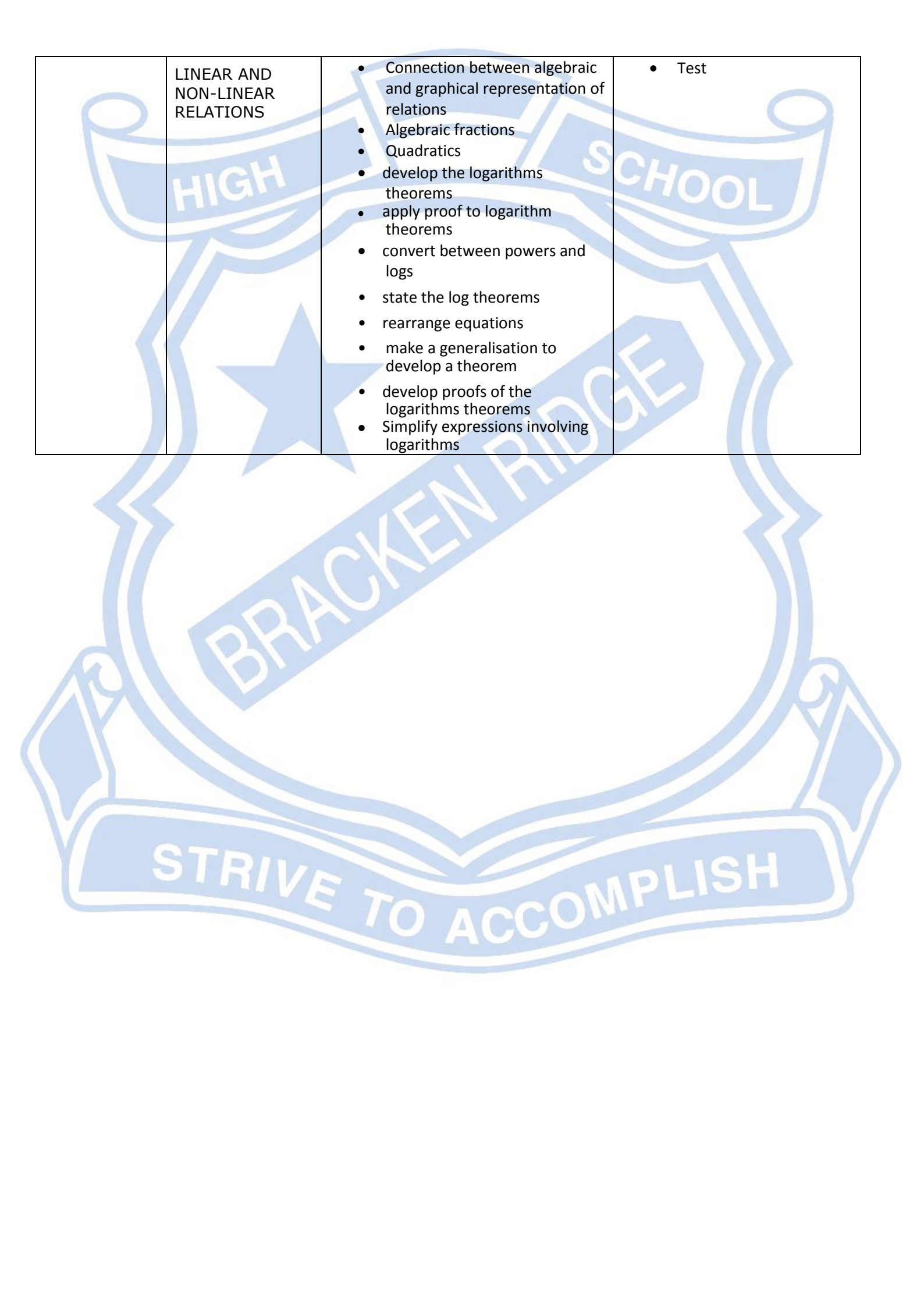


BRACKEN RIDGE STATE HIGH SCHOOL

Year 10 Extension Mathematics

Overview

TERM ALLOCATION AND LENGTH	UNIT	SUB TOPICS	ASSESSMENT
TERM 1 9 weeks	PYTHAGORAS AND TRIGONOMETRY	<ul style="list-style-type: none"> Calculating hypotenuse and short sides Calculating unknown sides using trig Calculating unknown angles using trig Angles of elevation and depression Bearings Calculating unknown sides and angles using the sine and cosine rules 	<ul style="list-style-type: none"> Test
	STATISTICS AND PROBABILITY	<ul style="list-style-type: none"> Two and three step chance experiments Experiments with and without replacement Assigning and determining probabilities 	<ul style="list-style-type: none"> Assignment
TERM 2 11 WEEKS	LINEAR AND NON-LINEAR RELATIONSHIPS	<ul style="list-style-type: none"> Gradient and y-intercept Straight line equation Simultaneous equations 	<ul style="list-style-type: none"> Test
	REAL NUMBERS	<ul style="list-style-type: none"> Indices 	
	PATTERNS AND ALGEBRA	<ul style="list-style-type: none"> Expanding and factorising Simplifying algebraic fractions 	
TERM 3 10 weeks	DATA	<ul style="list-style-type: none"> Interpreting tables and graphs 5 number summary Boxplots/parallel boxplots IQR Scatterplots 	<ul style="list-style-type: none"> Assignment
	UNITS OF MEASUREMENT AND GEOMETRIC REASONING	<ul style="list-style-type: none"> Surface area and volume of composite shapes Angle rules and proofs 	<ul style="list-style-type: none"> Test
TERM 4 8 weeks	MONEY AND FINANCIAL MATHEMATICS	<ul style="list-style-type: none"> Simple interest Compound interest Depreciation, appreciation and inflation 	<ul style="list-style-type: none"> Test



LINEAR AND NON-LINEAR RELATIONS	<ul style="list-style-type: none">• Connection between algebraic and graphical representation of relations• Algebraic fractions• Quadratics• develop the logarithms theorems• apply proof to logarithm theorems• convert between powers and logs• state the log theorems• rearrange equations• make a generalisation to develop a theorem• develop proofs of the logarithms theorems• Simplify expressions involving logarithms	<ul style="list-style-type: none">• Test
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