## 1 Contents

Chapter 1 - Number		Chapter 2 - Measurement - continued	
Multiples, Factors and Primes	3	Volume of Basic Solids 1	49
Integers, Powers and Roots 1	4	Volume of Basic Solids 2	50
Integers, Powers and Roots 2	5	Volume of Basic Solids 3	51
Integers, Powers and Roots 3	6	Volume of Composite Solids	52
Integers, Powers and Roots 4	7	Calculating Dimensions 1	53
Scientific Notation 1	8	Calculating Dimensions 2	54
Scientific Notation 2	9		
Problems with Decimal Numbers	10		
Working with Percentages 1	11	Chanton 2 Dight Angled Trionales	
Working with Percentages 2	12	Chapter 3 - Right Angled Triangles	
Working with Percentages 3		Similar Shapes 1	55
Working with Percentages 4		Similar Shapes 2	
Goods and Service Tax		•	
Working with Percentages 5	16	Similar Shapes 3	
Ratio 1			
Ratio 2		Recognising Similar Triangles 2	
Ratio 3		Outdoor Assignments 1	
Using a Ratio Table 1		Outdoor Assignments 2	
Using a Ratio Table 2		Investigating Triangles	
Using a Ratio Table 3		The Rule of Pythagoras 1	
Using a Ratio Table 4		The Rule of Pythagoras 2	
		Labelling and Measuring 1	
Financial Literacy 1		Labelling and Measuring 2	
Financial Literacy 2		The Ratio Triangle	67
Financial Literacy 3		Basics of Trigonometry 1	68
Growth and Decline	27	Basics of Trigonometry 2	69
		Basics of Trigonometry 3	70
		Applications of Trigonometry 1	71
Chapter 2 - Measurement		Applications of Trigonometry 2	72
•		Trigonometry in 3D Shapes 1	73
Units of Measurement 1	28	Trigonometry in 3D Shapes 2	74
Units of Measurement 2	29		
Accuracy and Rounding	30		
Maps and Plans	31	Chapter 4 - Algebra, Tables, Equations and G	raphs
Rates 1	32	chapter 1 / agenta, rabies, Equations and e	
Rates 2	33	Substitution 1	75
Rates 3	34	Substitution 2	76
Perimeters 1	35	Solving Linear Equations 1	77
Perimeters 2	36	Solving Linear Equations 2	
Area of Basic Shapes 1	37	Simultaneous Equations 1	
Area of Basic Shapes 2		Simultaneous Equations 2	
Area of Basic Shapes 3		Problems Using Simultaneous Equations	
Area of Basic Shapes 4		Linear Patterns 1	
Area of Basic Shapes 5		Linear Patterns 2	
Basic Shapes - Revision		Plotting Lines 1	
Area of Composite Shapes 1		Plotting Lines 2	
Area of Composite Shapes 2		Plotting Lines 3	
Area of Composite Shapes 3		Features of Line Graphs 1	
Surface Area 1		Features of Line Graphs 2	
		reaction of Line Graphs 2	

Features of Line Graphs 3 .....89

Features of Line Graphs 4 ......90

Surface Area 2 ......47

Surface Area 3 .......48

## Chapter 4 - Algebra, Tables, Equations and Graphs

Writing an Equation for a Line 1	91
Writing an Equation for a Line 2	92
Parallel Lines and Crossing Lines	93
Intersections Using Technology	94
Linear Problems	95
Quadratic Patterns	96
Plotting Parabolas 1	97
Plotting Parabolas 2	98
Sketching Parabolas 1	99
Sketching Parabolas 2	100
Wide and Narrow Parabolas 1	101
Wide and Narrow Parabolas 2	102
Factorised Equations 1	103
Factorised Equations 2	104
Factorised Equations 3	105
Writing Quadratic Equations 1	106
Writing Quadratic Equations 2	107
Optimisation Problem 1	108
Optimisation Problem 2	109
Writing Equations Using Technology	110

## **Chapter 5 - Practice Investigations**

Practice Investigation 1	111-113
Practice Investigation 2	114-116
Answers	117-125
Students Notes	126
Achievement Criteria	127

## **About this book**

This book contains notes and practice questions on mathematical methods across the Number, Measurement, Algebra and Geometry strands which comprise 1.2 Mathematical Methods.

Assessments for this standard are unlikely to be able to incorporate all the possible methods that are part of this standard but must enable the candidate to demonstrate their skills across multiple strands of mathematics. Students are able to and encouraged to use a calculator in their learning and assessment for this standard.

Student Notes		