

BUILDING BLOCKS

INTEGERS

7003	Add and Subtract – Number line		
7004	Add and Subtract – Biggest sign		
7005	Multiply and Divide		

BODMAS

7006	$\times + - \dots$ MAS		
7007	$\div \times + - \dots$ DMAS		
7008	<i>of</i> $\div \times + - \dots$ ODMAS		
7009	() <i>of</i> $\div \times + - \dots$ BODMAS		

MINI TEST:

Integers and BODMAS

FRACTIONS

7019	Equivalent Fractions		
7020	Mixed and Improper Fractions		
7021	Addition and Subtraction Basics		
7022	Adding and Subtracting Fractions		
7023	Multiply and Divide Basics		
7024	Multiplying and Dividing Fractions		
7025	Combined		

MINI TEST:

Fractions

www.refractions.co.za

ALGEBRA

8080	Using Algebra		
	Expressions and Definitions:		
8081	Terms and Factors		
8082	Constants and Variables		
8083	Coefficients and Exponents		
8084	Adding and Subtracting Terms		
8085	Multiplying Terms		
8086	Combined Multiplication and Addition		
8087	Products: Brackets		
8088	Products: Brackets and Simplify		
8089	Adding and Subtracting Expressions		
8090	Substitution		
8091	Algebraic Fractions: Numerator One Term		
8092	Algebraic Fractions: Numerator Multiple Terms		
8093	Squaring Expressions		
8094	Cubes and Roots of Expressions		

MINI TEST:

Algebra



FOUNDATIONS FOR GRADE 12

PRODUCTS

1001	Recap		
1002	(2 terms)(2 terms)		
1003	(2 terms)(3 terms)		

FACTORISATION

1004	Common Factor		
1005	2 Terms: Difference of Squares		
1006	2 Terms: Sum/Diff of Cubes		
1007	3 Terms: Easy Quadratic		
1008	3 Terms: Harder Quadratic		
1009	4 Terms: Grouping (Already Grouped)		
1010	4 Terms: Grouping		
1011	4 Terms: Grouping (Rearrange First)		
1012	Summary and identifying with terms		
1013	Combined		

MINI TEST:

Products and Factorisation

EQUATIONS

1027	Linear		
1028	Linear with Fractions		
1029	Exponential		
1030	Quadratic		
1031	Simultaneous: Elimination		
1032	Simultaneous: Substitution		
1033	Literal (Changing Subject of Formula)		

BUILDING BLOCKS

INEQUALITIES

1035	Recap: Number System and Notation		
1036	Lines to Notation		
1037	Notation to Lines		
1038	Solving Inequalities		

MINI TEST:
Equations and Inequalities

EXPONENTS

2001	Introduction and Summary		
2002	Applying 4 Laws		
2003	+ / - Sums		
2004	\times / $.$ Sums		
2005	Complex Calculations		

SURDS

2006	Simplify by Prime Factorisation		
2007	Multiplying out Brackets		
2008	Surds with Variables		
2009	Proofs		
2010	Rationalising the Denominator		

MINI TEST:
Exponents and Surds

www.refractions.co.za

ALGEBRAIC FRACTIONS

2011	Addition and Subtraction		
2012	Multiplication and Division		
2013	Comparing: Expression vs Equation		

MINI TEST:
Algebraic Fractions

COMPLETING THE SQUARE

2015	Introduction		
2016	Completing: No Coefficient		
2017	Completing: With Coefficient		
2018	Comparison: Expression vs Equation		

MINI TEST:
Completing the Square



FOUNDATIONS FOR GRADE 12

EQUATIONS

2020	Introduction and Summary		
2021	Quadratic: Factorise and Solve		
2022	Quadratic: Completing the Square		
2023	Quadratic: Formula		
2024	Quadratic: Square Both Sides		
2025	Quadratic: Square Root Both Sides		
2026	Quadratic: K – Method		
2027	Exponential: Same Base		
2028	Exponential: Quadratic Form		
2029	Simultaneous Equations		

MINI TEST:
Equations

INEQUALITIES

2032	Graphical Method		
2033	Algebraic Method		

MINI TEST:
Inequalities

NATURE OF ROOTS

2035	Δ Properties		
2036	Finding values		
2037	Proving values		

MINI TEST:
Nature of Roots