



# Equations

Section 1 – Algebraic Expressions

Section 2 – Linear Equations

Section 3 – Quadratic Equations

Section 4 – Polynomial Equations

Section 5 – Systems of Linear Equations

Section 6 – Inequations

## Section 1 – Algebraic Expressions

Components of an Equation

Simplifying Algebraic Expressions

Working with Parentheses

Factorising Using a Common Factor

Factorising a Trinomial

Factorising as a Difference of Two Squares

## Section 2 – Linear Equations

Solving Linear Equations

Solving Equations with Parentheses

Solving Equations with Fractions

## Section 3 – Quadratic Equations

Solving Quadratic Equations by Factorising – Common Factor

Solving Quadratic Equations by Factorising – Trinomials

Solving Quadratic Equations by Factorising – Difference of Squares

Solving Quadratic Equations using the Quadratic Formula

The Discriminant for Quadratic Equations

## Section 4 – Polynomial Equations

Polynomial Factors

Factorising using Synthetic Division with a Given Factor

Factorising using Synthetic Division Without a Given Factor

Starting Polynomial Equations

Solving Polynomial Equations Already Factorised

Solving Polynomial Equations Not Factorised



## **Section 5 – Systems of Linear Equations**

Solving by Elimination of a Variable

Solving More Complex Systems of Linear Equations

Solving by Substitution

## **Section 6 – Inequations**

Solving Inequations

Solving Inequations – Multiplying or Dividing by a Negative