

Edexcel International

IGCSE (9–1)

Mathematics

Specification Summary

Section 1: Numbers and Algebra

1.1 Integers

1.2 Fractions

1.3 Decimals

1.4 Powers & Roots: HCF / LCM / Prime Factors

1.5 Powers & Roots: Indices Rules

1.6 Powers & Roots: Surds

1.7 Set language and notation

1.8 Percentages

1.9 Ratio and proportion

1.9.1 Degree of accuracy (Upper & Lower Bounds)

1.9.2 Standard form

1.9.3 Applying number

1.9.4 Electronic calculators

Section 2: Equations, formulae and identities

2.1 Use of symbols

2.2 Algebraic manipulation: Simplify / Expand / Factorise

2.3 Algebraic manipulation: Changing the Subject of the Formula

2.4 Algebraic manipulation: Algebraic Fractions

2.5 Expressions and formulae: Substitution

2.6 Expressions and formulae: Problem Solving with Algebra

2.7 Linear equations

2.8 Proportion

2.9 Simultaneous linear equations

2.9.1 Quadratic equations: Solving Quadratics

2.9.2 Quadratic equations: Quadratic Simultaneous Equations

2.9.3 Inequalities

Section 3: Sequences, functions and graphs

3.1 Sequences

3.2 Functional notation

3.3 Graphs: Plotting Graphs

3.4 Graphs: Equations of a Line

3.5 Calculus

Section 4: Shape, space and measures

4.1 Angles and triangles

4.2 Polygons

4.3 Measures

4.5 Construction

4.6 Circle properties

4.7 Geometrical reasoning

4.8 Pythagoras Only

4.9 Trigonometry & Pythagoras

4.9.1 Mensuration of 2-D shapes

4.9.2 3-D shapes and volume

4.9.3 Similarity

Section 5: Vectors and transformation geometry

5.1 Vectors

5.2 Transformation geometry

Section 6: Statistics

6.1 Graphical representation of data: Histograms

6.2 Graphical representation of data: Cumulative Frequency

6.3 Statistical Measures (Mean, Median, Mode)

6.4 Probability: Simple Probability & Estimation

6.5 Probability: Tree Diagrams

6.6 Probability: Non-Replacement Problems