

Foundation Course Content Edexcel (Set 4, 5 and 6)

Unit 1

Calculations

Decimal numbers

Place value

Factors and multiples

Squares, cubes and roots

Index notation

Prime factors

Unit 2

Algebraic expressions

Substitution

Formulae

Expanding brackets

Factorising

Using expressions and formulae

Unit 3

Frequency tables

Two-way tables

Representing data

Time series

Stem and leaf diagrams

Pie charts

Scatter graphs

Line of best fit

Unit 4

Mixed numbers and improper fractions

Add and subtract fractions

Multiply and divide fractions

Fractions and decimals

Calculating with percentages

Unit 5

Solving equations

Solving equations with brackets

Inequalities

Using formulae

Generating sequences

Using the nth term

Unit 6

Properties of shapes

Angles in parallel lines

Angles in triangles

Exterior and interior angles

Geometrical problems

Unit 7

Mean, mode, median and range

Estimating the mean

Sampling

Unit 8

Rectangles, parallelograms and triangles

Trapezia and changing units

Area of compound shapes

Surface area of 3D shapes

Volume of prisms

Unit 9

Coordinates

Linear graphs

Gradient

$Y = mx + c$

Real life graphs

Distance-time graphs

## Unit 10

Translation

Reflection

Rotation

Enlargement

Describing enlargements

Combining transformations

## Unit 11

Ratio and proportion

Writing ratios

Using ratio

Ratios and measures

Using proportion

Comparing using ratio

Proportion and graphs

## Unit 12

Pythagoras' theorem

Trigonometry (sine, cosine and tangent)

Inverse trigonometry

## Unit 13

Calculating probability

Two events

Experimental probability

Venn diagrams

Tree diagrams

## Unit 14

Percentages

Growth and decay

Compound measures

Distance, speed and time

Direct and inverse proportion

## Unit 15

3D Solids

Plans and elevations

Accurate drawings

Scale drawings and maps

Constructions

Loci and regions

Bearings

## Unit 16

Expanding double brackets

Plotting quadratic graphs

Using quadratic graphs

Factorising quadratic expressions

Solving quadratic equations

## Unit 17

Circumference of a circle

Area of a circle

Semicircles and sectors

Composite 2D shapes and cylinders

Pyramids and cones

Spheres and composite shapes

## Unit 18

Multiplying and dividing fractions

The laws of indices

Writing values in standard form

Calculating with standard form

## Unit 19

Similarity and enlargements

Using similarity

Congruence

Vectors

## Unit 20

Graphs of cubic and reciprocal graphs

Non-linear graphs

Solving simultaneous equations graphically

Solving simultaneous equations algebraically

Rearranging formulae

Proof