



## Summary of Further Information

### GCSE Maths

Edexcel's guidance for Maths and Further Maths states that:

**“The aim should still be to cover all specification content in teaching and learning.”**

A broad topic list for each exam has been given. This does not discount any topic from the exams, but some topics may be helpful to target revision in the week leading up to each exam. Your maths teacher will provide targeted revision nearer the time.

Otherwise, this information does not change any of the approaches in finishing and revising the full content.

A formula page will be provided in the exam. To help you familiarise yourself with this, we will pass on a copy for you to use in and out of class for the rest of the year. Electronic copies of the formula page can be found on these links:

Foundation: [w73374-gcse-mathematics-1ma1-exam-aid-1f-2f-3f.pdf \(pearson.com\)](https://www.pearson.com/uk/education/secondary/revision/revision-aids/revision-aids-for-gcse-maths/revision-aids-for-gcse-maths-1ma1-exam-aid-1f-2f-3f.pdf)

Higher: [w73375-gcse-mathematics-1ma1-exam-aid-1h-2h-3h.pdf \(pearson.com\)](https://www.pearson.com/uk/education/secondary/revision/revision-aids/revision-aids-for-gcse-maths/revision-aids-for-gcse-maths-1ma1-exam-aid-1h-2h-3h.pdf)

The following pages gives the full lists of what Excel have provided.



## Exam content list for Foundation Paper 1

### Paper 1F – grouped by content area

<b>Number (*see Ratio – some overlap of topic areas)</b>	
Arithmetic	Money
	Negative number
Fractions	Order fractions, decimals, percentages
	Fraction of an amount
	Fraction arithmetic
Properties	Place value
	Product of prime factors
Standard Form	Conversion
	Calculation
Approximation and Estimation	Estimation
<b>Algebra</b>	
Manipulation	Simplification
	Substitute values
Equations and inequalities	Linear inequality
	Quadratic equation
Graphs	Quadratic graph
Sequences	Linear sequence
<b>Ratio, proportion, and rates of change (*see Number – some overlap of topic areas)</b>	
Conversion	Length
Percentages	Percentage of an amount
	Percentage increase
Ratio	Write as a ratio
	Share in a ratio
Proportion	Direct proportion

Compound Measures	Speed
	Density
<b>Geometry and measures</b>	
Shape	Reflection
	Plan and elevation
Angles	Angles in a polygon
Length, area and volume	Volume of a cube
	Volume of a cylinder
Pythagoras's Theorem and Trigonometry	Exact trigonometric values
<b>Probability</b>	
Probability	Probability
	Frequency tree
<b>Statistics</b>	
Diagrams	Pictogram
	Bar chart
	Stem and leaf diagram

## Exam content list for Foundation Paper 2

### Paper 2F – grouped by content area

<b>Number (*see Ratio – some overlap of topic areas)</b>	
Arithmetic	Money
	Negative number
Fractions	Fraction arithmetic
Properties	Order fractions
	Order integers
Approximation and Estimation	Multiples
	Rounding
Other	Error interval
	Mathematical symbols
<b>Algebra</b>	
Manipulation	Simplification
	Expansion of bracket
	Factorisation
	Laws of indices
Equations and inequalities	Linear simultaneous equations
Graphs	Coordinates
	Straight line graph
Functions	Number machines
<b>Ratio, proportion and rates of change (*see Number – some overlap of topic areas)</b>	
Conversions	Mass, time, area
	Scale drawing
Percentages	Decimal to percentage
	Percentage profit
	Depreciation

Ratio	Write as a ratio
	Use of ratio
Proportion	Direct proportion
	Currency conversion
<b>Geometry and measures</b>	
Shape	Polygons
	Circles
	Parallel and perpendicular lines
	Transformations
Angles	Angles in a triangle
	Vertically opposite angles
Length, area and volume	Area of a rectangle
<b>Probability</b>	
Probability	Tree diagram
	Combined events
<b>Statistics</b>	
Diagrams	Interpret graph
	Two-way table
	Frequency table
Measures	Mode
	Median
	Mean



## Exam content list for Foundation Paper 3

Paper 3F – grouped by content area	
<b>Number (*see Ratio – some overlap of topic areas)</b>	
Arithmetic	Four operations
	Negative number
Fractions	Fraction of an amount
	One amount as a fraction of another
	Equivalent fractions
Properties	Factors
	Lowest Common Multiple
Powers and roots	Square root
Approximation and estimation	Rounding
Other	Calculator use
<b>Algebra</b>	
Manipulation	Simplification
	Expansion of bracket
	Factorisation
	Substitute values
	Change subject of a formula
	Forming an expression
Equations and inequalities	Linear equation
	Form an equation
Sequences	Linear sequence
<b>Ratio, proportion and rates of change (*see Number – some overlap of topic areas)</b>	
Conversions	Time
	Compound units
	Scale drawing

Percentages	Percentage to fraction
	One quantity as a percentage of another
	Percentage decrease
	Reverse percentage
Ratio	Write as a ratio
	1 : n form
Proportion	Direct proportion
Compound measures	Average speed
<b>Geometry and measures</b>	
Shape	Triangle properties
	Quadrilaterals
	Triangular prism
Angles	Angle properties of parallel lines
	Angles in a triangle
	Vertically opposite angles
	Bearings
Length, area and volume	Area of a triangle
	Area of a trapezium
Pythagoras's Theorem and Trigonometry	Pythagoras's Theorem
<b>Probability</b>	
Probability	Probability scale
	Probability
<b>Statistics</b>	
Diagrams	Frequency polygon
Measures	Median
	Range
Population	Comparison of distributions

## Exam content list for Higher Paper 1

Paper 1H – grouped by content area	
<b>Number (*see Ratio – some overlap of topic areas)</b>	
Fractions	Fraction of an amount
	Fraction arithmetic
	Recurring decimal to fraction
Properties	Product of prime factors
	Negative and fractional indices
Powers and roots	Simplification of surds
Standard Form	Conversion
	Calculation
<b>Algebra</b>	
Manipulation	Simplification
	Expansion of brackets
	Algebraic fractions
Equations and inequalities	Linear inequality
	Form an equation
	Quadratic equation
	Equation of a tangent to a circle
Graphs	Quadratic graph
	Speed-time graph
	Gradients of parallel and perpendicular lines
	Gradient of a curve

<b>Ratio, proportion and rates of change (*see Number – some overlap of topic areas)</b>	
Percentages	Percentage of an amount
Ratio	Write as a ratio
	Use of ratio
	Share in a ratio
	Ratio to fraction
Proportion	Equations of proportion
Compound Measures	Density
<b>Geometry and measures</b>	
Angles	Angles in a polygon
Length, area and volume	Area of a triangle
	Volume of a cube
	Surface area of a cuboid
	Area of a sector
Pythagoras's Theorem and Trigonometry	Pythagoras's Theorem
	Exact trigonometric values
Vectors	Vector geometry
<b>Probability</b>	
Probability	Probability
	Independent combined events
<b>Statistics</b>	
Diagrams	Cumulative frequency graph
Measures	Mean
	Inter-quartile range



## Exam content list for Higher Paper 2

Paper 2H – grouped by content area	
<b>Number (*see Ratio – some overlap of topic areas)</b>	
Approximation and estimation	Error interval
Other	Use of a calculator
<b>Algebra</b>	
Manipulation	Simplification
	Expansion of bracket
	Factorisation
	Laws of indices
Equations and inequalities	Linear equation
	Equations of parallel lines
	Form an equation
	Quadratic inequality
Graphs	Coordinates
	Transformations of functions
	Graphs of trigonometric functions
Functions	Inverse and composite functions
<b>Ratio, proportion and rates of change (*see Number – some overlap of topic areas)</b>	
Conversions	Area
Percentages	Depreciation
Ratio	Use of ratio
Proportion	Direct proportion
	Currency conversion
	Inverse proportion
Compound measures	Pressure

<b>Geometry and measures</b>	
Shape	Transformations
Angles	Circle theorems
Length, area and volume	Area of a rectangle
	Volume of composite solid
Pythagoras's Theorem and Trigonometry	Sine and Cosine Rules
<b>Probability</b>	
Probability	Venn diagram
	Probability from a Venn diagram
<b>Statistics</b>	
Diagrams	Box plot
Measures	Lower and upper quartiles
Populations	Compare distributions
	Capture-recapture method

## Exam content list for Higher Paper 3

Paper 3H – grouped by content area	
<b>Number (*see Ratio – some overlap of topic areas)</b>	
Arithmetic	Negative number
Properties	Laws of indices
Approximation and estimation	Bounds
Other	Product rule for counting
<b>Algebra</b>	
Manipulation	Simplification
	Expansion of bracket
	Substitute values
	Difference of two squares
	Expansion of brackets
	Change subject of a formula
	Forming an expression
	Algebraic fractions
Equations and inequalities	Set up and solve equation
	Simultaneous equations linear/quadratic
Graphs	Gradient of a straight line graph
<b>Ratio, proportion and rates of change (*see Number – some overlap of topic areas)</b>	
Conversions	Time
Percentages	Percentage decrease
	Depreciation
	Reverse percentage

Ratio	Write as a ratio
	1 : n form
	Share in a ratio
Proportion	Direct proportion
Compound Measures	Average speed
Growth and decay	General iterative processes
<b>Geometry and measures</b>	
Angles	Circle theorems
Length, area and volume	Area of a trapezium
	Similar triangles
Pythagoras's Theorem and Trigonometry	Pythagoras's Theorem
	Trigonometry
	Trigonometry in 3-D
Vectors	Column vectors
<b>Probability</b>	
Probability	Dependent combined events
<b>Statistics</b>	
Diagrams	Frequency polygon
	Histogram