Learners Cloud

Education, Anywhere, Anytime

WJEC GCSE MATHS EXAMINATION BOARD COVERAGE

TIER	TOPIC	HEADING	SUB HEADING	WJEC UNIT 1	WJEC UNIT 2	WJEC UNIT 3
Both	Number	Integers	Ordering numbers		y	
Both	Number	Integers	Rounding numbers	y	y	y
Both	Number	Integers	Adding and subtracting whole numbers	y		
Both	Number	Integers	Dividing whole numbers	y		
Both	Number	Integers	BIDMAS	y		
Both	Number	Integers	Inverse operations			
Both	Number	Negative numbers	Understanding negative numbers	y		
Both	Number	Decimals	integers and decimals : the four basic operations	y	y	y
Both	Number	Decimals	Ordering decimals		y	
Both	Number	Decimals	Using place value in calculating with decimals		y	
Both	Number	Decimals	Order of operation : BIDMAS	y	y	y
Both	Number	Decimals	Rounding decimals		y	
Both	Number	Decimals	Estimating decimals		y	
Both	Number	Decimals	Recognising their corresponding fractions	y		
Both	Number	Factors, primes and powers	Multiples, factors and prime numbers		y	
Both	Number	Factors, primes and powers	Highest common factor (hcf) and lowest common multiple (lcm)		y	
Both	Number	Factors, primes and powers	Squares, cubes and roots		y	
Both	Number	Factors, primes and powers	Index form		y	
Both	Number	Factors, primes and powers	Reciprocals		y	
Both	Number	Fractions	Equivalent fractions	y	y	
Both	Number	Fractions	Adding and subtracting fractions	y	y	
Both	Number	Fractions	Multiplying and dividing fractions	y	y	
Both	Number	Fractions	Comparing fractions	y	y	
Both	Number	Fractions	Improper fractions and mixed numbers	y	y	
Both	Number	Fractions	Performing calculations with mixed numbers	y	y	
Both	Number	Fractions	Solving problems involving fractions	y	y	
Both	Number	Fractions, decimals and percentages	Converting fractions	y	y	
Both	Number	Fractions, decimals and percentages	Converting decimals	y	y	
Both	Number	Fractions, decimals and percentages	Converting percentages	y	y	
Both	Number	Fractions, decimals and percentages	Ordering decimals, fractions and percentages		y	
Higher	Number	Fractions, decimals and percentages	Recurring decimals		y	
Higher	Number	Index notation and surds	Index form and the law of indices		y	
Higher	Number	Index notation and surds	Fractional indices		y	
Higher	Number	Index notation and surds	Standard form		y	y
Higher	Number	Index notation and surds	Surds		y	
Both	Number	Percentages	Writing one quantity as a percentage of another	y	y	
Both	Number	Percentages	Calculating the percentage of an amount	y	y	
Both	Number	Percentages	Increasing or decreasing an amount by a percentage	y	y	
Both	Number	Percentages	Real-life percentage problems	y	y	
Higher	Number	Percentages	Percentage of a quantity	y	y	
Higher	Number	Percentages	Multiplier use in calculations	y	y	
Higher	Number	Percentages	Profit and loss	y	y	
Higher	Number	Percentages	Compound and simple interest	y	y	
Higher	Number	Percentages	Depreciation	y	y	
Higher	Number	Percentages	Reverse percentages	y	y	
Higher	Number	Ratio and proportion	Simplifying a ratio		y	
Higher	Number	Ratio and proportion	Unitary form		y	
Higher	Number	Ratio and proportion	Solving ratio problems		y	
Higher	Number	Ratio and proportion	Direct and inverse proportion		y	
Higher	Number	Ratio and proportion	More complex direct and inverse proportion problems		y	
Both	Number	Ratio and proportion	Simplifying a ratio		y	
Both	Number	Ratio and proportion	Unitary form (1 : n)		y	
Both	Number	Ratio and proportion	Ratio problems		y	
Both	Number	Ratio and proportion	Dividing a quantity in a given ratio		y	

TIER	TOPIC	HEADING	SUB HEADING	WJEC UNIT 1	WJEC UNIT 2	WJEC UNIT 3
Both	Number	Ratio and proportion	Direct proportion		y	
Higher	Algebra	Algebraic expressions	Evaluating expressions		y	
Higher	Algebra	Algebraic expressions	Simplifying expressions		y	
Higher	Algebra	Algebraic expressions	Multiplying out a pair of brackets		y	
Higher	Algebra	Algebraic expressions	Introduction to factorising		y	
Higher	Algebra	Algebraic expressions	Factorising a quadratic			y
Higher	Algebra	Algebraic expressions	Factorising a more complex quadratic			y
Higher	Algebra	Algebraic expressions	Simplifying algebraic fractions		y	
Both	Algebra	Algebraic expressions	Writing an expression		y	
Both	Algebra	Algebraic expressions	Evaluating and simplifying an expression		y	
Both	Algebra	Algebraic expressions	Multiplying in algebra		y	
Both	Algebra	Algebraic expressions	Factorising		y	
Both	Algebra	Algebraic statements	Equation, expression or formula?		y	
Both	Algebra	Linear equations	Methods for solving equations		y	y
Both	Algebra	Linear equations	Setting up and solving equations		y	y
Both	Algebra	Linear equations	Solving equations with an unknown on both sides		y	y
Both	Algebra	Linear equations	Solving equations which contain brackets		y	y
Both	Algebra	Linear equations	Solving equations with brackets and negative numbers		y	y
Higher	Algebra	Linear equations	Solving equations		y	y
Higher	Algebra	Linear equations	Setting up equations		y	y
Higher	Algebra	Linear equations	Solving equations with an unknown on both sides		y	y
Higher	Algebra	Linear equations	Solving equations containing brackets or fractions		y	y
Higher	Algebra	Formulae	Using formulae	y		y
Higher	Algebra	Formulae	Changing the subject of a formula		y	
Both	Algebra	Formulae	Formulae	y		y
Both	Algebra	Formulae	Writing an algebraic formula	y		y
Both	Algebra	Formulae	Changing the subject of a formula		y	
Higher	Algebra	Further graphs	Cubic functions		y	
Higher	Algebra	Further graphs	Reciprocal functions		y	
Higher	Algebra	Further graphs	Exponential functions		y	
Higher	Algebra	Further graphs	Equations and their graphs		y	
Higher	Algebra	Further graphs	Trigonometric functions			
Higher	Algebra	Further graphs	Graph of the circle			
Higher	Algebra	Further graphs	Using graphs to solve a pair of equations		y	
Both	Algebra	Index notation	Using index notation		y	
Both	Algebra	Inequalities	Solving inequalities and showing inequalities on a number line		y	
Both	Algebra	Inequalities	Finding integer solutions to an inequality		y	
Higher	Algebra	Inequalities	Solving linear inequalities		y	
Higher	Algebra	Inequalities	Inequalities with integer solutions		y	
Higher	Algebra	Inequalities	Solving inequalities with two variables graphically		y	
Both	Algebra	Linear graphs	Simple linear graphs		y	
Both	Algebra	Linear graphs	Using y = mx + c		y	
Higher	Algebra	Linear graphs	Parallel and perpendicular lines		y	
Both	Algebra	Number patterns and sequences	Introduction to number sequences	y		
Both	Algebra	Number patterns and sequences	The nth term	y		
Higher	Algebra	Quadratic equations	Factorising quadratic equations : example			y
Higher	Algebra	Quadratic equations	Solving quadratic equations by completing the square			y
Higher	Algebra	Quadratic equations	The quadratic formula			y
Higher	Algebra	Quadratic equations	Equations with algebraic fractions			y
Higher	Algebra	Quadratic equations	Problems involving quadratic equations			y
Higher	Algebra	Quadratic graphs	Plotting quadratic graphs		y	y
Higher	Algebra	Quadratic graphs	Solving quadratic equations : example			y
Both	Algebra	Real-life graphs	Real-life plots and graphs	y		y
Higher	Algebra	Simultaneous equations	Solving simultaneous equations using elimination		y	
Higher	Algebra	Simultaneous equations	Solving simultaneous equations using substitution		y	
Higher	Algebra	Simultaneous equations	Solving simultaneous equations graphically		y	
Higher	Algebra	Simultaneous equations	Setting up and solving simultaneous equations		y	
Higher	Algebra	Simultaneous equations	Solving a linear and quadratic equation simultaneously			y
Both	Algebra	Substitution	Substitution in an expression		y	
Higher	Algebra	Transformation of functions	Types of transformations		y	
Higher	Algebra	Transformation of functions	Translation		y	

TIER	TOPIC	HEADING	SUB HEADING	WJEC UNIT 1	WJEC UNIT 2	WJEC UNIT 3
Both	Algebra	Trial and improvement	Trial and improvement			y
Higher	Algebra	Trial and improvement	Finding an approximate solution using trial and improvement			y
Both	Geometry and Measure	Angles and lines	Types of angles		y	
Both	Geometry and Measure	Angles and lines	Estimating the size of angles		y	
Both	Geometry and Measure	Angles and lines	Measuring angles and lengths	y		
Both	Geometry and Measure	Angles and lines	Parallel and perpendicular lines		y	
Both	Geometry and Measure	Angles and lines	Constructing an angle		y	
Both	Geometry and Measure	Angles and lines	Constructing a triangle		y	
Both	Geometry and Measure	Angles and lines	Angles on a straight line and angles around a point		y	
Higher	Geometry and Measure	Angles and polygons	Triangles and quadrilaterals		y	
Higher	Geometry and Measure	Angles and polygons	Interior and exterior angles in a polygon			y
Higher	Geometry and Measure	Angles and polygons	Corresponding and alternate angles		y	
Higher	Geometry and Measure	Angles and polygons	Proving angle facts		y	
Higher	Geometry and Measure	Angles and polygons	Bearings	y		
Both	Geometry and Measure	Shapes and angles	Angle facts: triangles		y	
Both	Geometry and Measure	Shapes and angles	Angle facts: quadrilaterals		y	
Both	Geometry and Measure	Shapes and angles	Interior and exterior angles		y	y
Both	Geometry and Measure	Shapes and angles	Parallel lines		y	
Both	Geometry and Measure	Shapes and angles	Bearings	y		
Both	Geometry and Measure	Circles	The circle	y	y	
Both	Geometry and Measure	Circles	Circumference and area	y		
Higher	Geometry and Measure	Circles	Circles and arcs	y		
Higher	Geometry and Measure	Circles	Sectors and segments	y		
Higher	Geometry and Measure	Circles	Circle theorems		y	
Higher	Geometry and Measure	Circles	Circle theorem: examples		y	
Both	Geometry and Measure	Construction and loci	Constructing a triangle			y
Both	Geometry and Measure	Construction and loci	Constructing other shapes			y
Both	Geometry and Measure	Construction and loci	Constructing a perpendicular bisector of a line			y
Both	Geometry and Measure	Construction and loci	Bisecting an angle			y
Both	Geometry and Measure	Construction and loci	Constructing the perpendicular from a point to a line			y
Both	Geometry and Measure	Construction and loci	Constructing the perpendicular to a line from a point on the line			y
Both	Geometry and Measure	Construction and loci	Constructing the locus of points from a fixed point			y
Both	Geometry and Measure	Construction and loci	Constructing the locus of points from a fixed line			y
Both	Geometry and Measure	Construction and loci	Constructing a region that satisfies a given set of conditions			y
Both	Geometry and Measure	Co-ordinates	Understanding co-ordinates		y	
Higher	Geometry and Measure	Co-ordinates	3-D co-ordinates			
Both	Geometry and Measure	Measure	Imperial and metric units	y	y	y
Both	Geometry and Measure	Measure	Convert metric units	y	y	y
Both	Geometry and Measure	Measure	Speed, distance and time	y		y
Both	Geometry and Measure	Measure	Mass, density and volume	y		y
Higher	Geometry and Measure	Measure	Converting metric units	y	y	y
Higher	Geometry and Measure	Measure	Converting imperial units	y	y	y
Higher	Geometry and Measure	Measure	Speed, distance and time conversion	y	y	y
Higher	Geometry and Measure	Measure	Mass, density and volume conversion	y	y	y
Higher	Geometry and Measure	Measure	Length, area or volume expressions	y	y	y
Higher	Geometry and Measure	Measure	Upper and lower bounds		y	y
Both	Geometry and Measure	Measuring from scales	Measurements and scales	y	y	y
Both	Geometry and Measure	Measuring from scales	Time and units	y	y	y
Both	Geometry and Measure	Measuring from scales	Timetables	y	y	y
Both	Geometry and Measure	Perimeter and area	Calculating perimeter	y		y
Both	Geometry and Measure	Perimeter and area	Calculating area	y		y
Both	Geometry and Measure	Perimeter and area	Compound shapes	y		y
Both	Geometry and Measure	Perimeter and area	Converting units	y		y
Higher	Geometry and Measure	Perimeter and area	Area and perimeter of 2-d shapes	y		y
Higher	Geometry and Measure	Perimeter and area	Area and circumference of a circle	y		y
Higher	Geometry and Measure	Perimeter and area	Converting between units of measure	y		y
Higher	Geometry and Measure	Volume and surface area	Volume of 3-D shapes	y		y
Higher	Geometry and Measure	Volume and surface area	Converting units of volume	y		y
Higher	Geometry and Measure	Volume and surface area	Surface area of a prism and a cylinder	y		y
Higher	Geometry and Measure	Volume and surface area	Surface area of a sphere and a cone	y		y
Both	Geometry and Measure	3-D shapes	Names and nets of common shapes		y	

TIER	TOPIC	HEADING	SUB HEADING	WJEC UNIT 1	WJEC UNIT 2	WJEC UNIT 3
Both	Geometry and Measure	3-D shapes	Front and side elevations		y	
Both	Geometry and Measure	3-D shapes	Using elevations to draw shapes		y	
Both	Geometry and Measure	3-D shapes	Planes of symmetry		y	
Both	Geometry and Measure	Pythagoras' theorem	Finding the hypotenuse using Pythagoras' theorem			y
Both	Geometry and Measure	Pythagoras' theorem	Finding a shorter side using Pythagoras' theorem			y
Both	Geometry and Measure	Pythagoras' theorem	Calculating the distance between two points			y
Both	Geometry and Measure	Pythagoras' theorem	Pythagoras' theorem and real-life problems			y
Higher	Geometry and Measure	Pythagoras' theorem	3-dimensional shapes			y
Higher	Geometry and Measure	Similarity and congruence	Calculating sides and areas of similar shapes			y
Higher	Geometry and Measure	Similarity and congruence	Calculating volumes of similar 3-d shapes			y
Higher	Geometry and Measure	Similarity and congruence	Volume and area of similar solids: example			y
Higher	Geometry and Measure	Similarity and congruence	Congruence			y
Both	Geometry and Measure	Similarity, congruence and symmetry	Similarity and congruence			y
Both	Geometry and Measure	Similarity, congruence and symmetry	Line symmetry		y	
Both	Geometry and Measure	Similarity, congruence and symmetry	Rotational symmetry		y	
Both	Geometry and Measure	Similarity, congruence and symmetry	Tessellation		y	
Both	Geometry and Measure	Surface area and volume	Calculating volume of 3-d shapes	y		y
Both	Geometry and Measure	Surface area and volume	Converting units of volume	y		y
Both	Geometry and Measure	Surface area and volume	Calculating the surface area of a prism	y		y
Higher	Geometry and Measure	Transformations	Rotation		y	
Higher	Geometry and Measure	Transformations	Reflection		y	
Higher	Geometry and Measure	Transformations	Translation		y	
Higher	Geometry and Measure	Transformations	Enlargement		y	
Higher	Geometry and Measure	Transformations	Multiple transformations and describing these as a single transformation		y	
Both	Geometry and Measure	Transformations	Rotation		y	
Both	Geometry and Measure	Transformations	Reflection		y	
Both	Geometry and Measure	Transformations	Translation		y	
Both	Geometry and Measure	Transformations	Enlargement		y	
Both	Geometry and Measure	Transformations	Multiple transformations		y	
Higher	Geometry and Measure	Trigonometry	The three trigonometric ratios			y
Higher	Geometry and Measure	Trigonometry	Using trigonometry to find a length			y
Higher	Geometry and Measure	Trigonometry	Using trigonometry to find angles			y
Higher	Geometry and Measure	Trigonometry	Using trigonometry to solve problems			y
Higher	Geometry and Measure	Trigonometry	Using trigonometry in 3-d shapes			y
Higher	Geometry and Measure	Trigonometry	The area of a triangle			y
Higher	Geometry and Measure	Trigonometry	The sine rule			y
Higher	Geometry and Measure	Trigonometry	The cosine rule			y
Higher	Geometry and Measure	Vectors	Vector quantities			
Higher	Geometry and Measure	Vectors	The laws of vector addition			
Higher	Geometry and Measure	Vectors	Parallel vectors			
Higher	Geometry and Measure	Vectors	Solving geometric problems involving vectors			
Both	Statistics and Probability	Averages	Comparing distributions	y		y
Both	Statistics and Probability	Averages	Mean, median, mode and range	y		y
Both	Statistics and Probability	Averages	Stem and leaf diagrams	y		y
Both	Statistics and Probability	Averages	Ungrouped frequency tables	y		y
Both	Statistics and Probability	Averages	Grouped frequency tables	y		y
Higher	Statistics and Probability	Averages	Inter-quartile range and stem and leaf diagrams	y		y
Higher	Statistics and Probability	Averages	Moving averages	y		y
Both	Statistics and Probability	Collecting data	Collecting and recording data	y		y
Both	Statistics and Probability	Collecting data	Two-way tables	y		y
Both	Statistics and Probability	Collecting data	Questionnaires	y		y
Higher	Statistics and Probability	Collecting data	Sampling	y		y
Both	Statistics and Probability	Presenting data	Bar charts, pie charts, line graphs, frequency diagrams, histograms and frequency polygons	y		y
Both	Statistics and Probability	Presenting data	Pictograms	y		y
Higher	Statistics and Probability	Presenting data	Cumulative frequency graphs			y
Higher	Statistics and Probability	Presenting data	Box plots, data comparison and histograms with unequal widths			y
Both	Statistics and Probability	Presenting data	Scatter graphs and correlations			y
Both	Statistics and Probability	Probability	The probability scale and writing probabilities		y	
Both	Statistics and Probability	Probability	Two-way probability tables		y	
Both	Statistics and Probability	Probability	Mutually exclusive events		y	
Both	Statistics and Probability	Probability	Relative frequency		y	

TIER	TOPIC	HEADING	SUB HEADING	WJEC UNIT 1	WJEC UNIT 2	WJEC UNIT 3
Both	Statistics and Probability	Probability	Probability and sample spaces		y	
Higher	Statistics and Probability	Probability	Mutually exclusive events		y	
Higher	Statistics and Probability	Probability	Independent events		y	
Higher	Statistics and Probability	Probability	Probability trees		y	
Higher	Statistics and Probability	Probability	Relative frequency		y	