Higher Maths Revision List and Sparx Codes

Topics highlighted yellow only appear in the higher paper

Strand	Substrand	Topic	Sparx Independent Learning Code	☺	😐	☹
Number	Operations	Adding and subtracting integers	U417			
Number	Operations	Adding and subtracting decimals	U478			
Number	Operations	Multiplying and dividing with place value	U735			
Number	Operations	Formal multiply integers	U127			
Number	Operations	Formal multiply decimals	U293			
Number	Operations	Using a written method to divide integers	U453			
Number	Operations	Formal divide with decimals	U868			
Number	Negative numbers	Adding and subtracting negative numbers	U742			
Number	Negative numbers	Multiplying and dividing negative numbers	U548			
Number	Roots and powers	Calculating with roots and powers	U851			
Number	Roots and powers	Estimating roots and powers	U299			
Number	Roots and powers	Higher Indices 1	U985			
Number	Roots and powers	Higher Indices 2	U772			
Number	Operations	Using the correct order of operations	U976			
Number	Number skills	Using a calculator	U926			
Number	Index rules	Index rules with positive indices	U235			
Number	Index rules	Index rules with negative indices	U694			
Number	Standard form	Using standard form with positive indices	U330			
Number	Standard form	Using standard form with negative indices	U534			
Number	Standard form	Multiplying and dividing standard form	U264			
Number	Standard form	Adding and subtracting standard form	U290			
Number	Standard form	Standard form with a calculator	U161			
Number	Rounding	Rounding decimals	U298			
Number	Rounding	Rounding integers using significant figures	U731			
Number	Rounding	Rounding decimals using significant figures	U965			
Number	Rounding	Estimating calculations	U225			
Number	Rounding	Finding error intervals	U657			
Number	Rounding	Truncating decimals	U108			
Number	Rounding	Error intervals for truncated numbers	U301			
Number	Rounding	Finding bounds for calculations	U587			
Number	Fractions	Ordering fractions	U746			
Number	Fractions	Adding and subtracting fractions	U736			
Number	Fractions	Converting mixed numbers/improper fractions	U692			

Number	Fractions	Adding and subtracting mixed numbers	U793			
Number	Fractions	Ordering fractions and mixed numbers	U439			
Number	Fractions	Multiplying fractions	U475			
Number	Fractions	Multiplying with mixed numbers	U224			
Number	Fractions	Dividing fractions	U544			
Number	Fractions	Dividing with mixed numbers	U538			
Number	Fractions	Problem solving: Fractions and mixed numbers	U874			
Number	FDP	Converting between FDP	U888			
Number	FDP	Ordering fractions, decimals and percentages	U594			
Number	FDP	Writing numbers as % of other numbers	U925			
Number	FDP	Finding fractions of amounts non-calc	U881			
Number	FDP	Finding fractions of amounts with a calculator	U916			
Number	FDP	Finding percentages of amounts non-calc	U554			
Number	FDP	Finding percentages of amounts calc	U349			
Number	FDP	Converting fractions to recurring decimals	U550			
Number	FDP	Converting recurring decimals to fractions	U689			
Number	Percentage change	Percentage change without a calculator	U773			
Number	Percentage change	Percentage change with a calculator	U671			
Number	Percentage change	Finding original values	U286			
Number	Percentage change	Percentage an amount has been changed	U278			
Number	Percentage change	Simple interest calculations	U533			
Number	Percentage change	Compound interest calculations	U332			
Number	Percentage change	Growth and decay	U988			
Number	Types of number	Finding the lowest common multiple (LCM)	U751			
Number	Types of number	Finding the highest common factor (HCF)	U529			
Number	Types of number	Finding prime numbers	U236			
Number	Types of number	Prime factor decomposition	U739			
Number	Types of number	Finding the HCF and LCM using prime factors	U250			
Number	Surds	Multiplying and dividing surds	U633			
Number	Surds	Simplifying surds	U338			
Number	Surds	Adding and subtracting surds	U872			
Number	Surds	Expanding brackets with surds	U499			
Number	Surds	Rationalising denominators containing 1 term	U707			
Number	Surds	Rationalising denominators containing 2 terms	U281			
Algebra	Algebraic notation	Using algebraic notation	U613			
Algebra	Substitution	Substituting into expressions	U201			
Algebra	Substitution	Substituting into algebraic formulae	U585			
Algebra	Substitution	Substituting into real-life formulae	U144			
Algebra	Simplifying	Simplifying expressions by collecting like terms	U105			
Algebra	Simplifying	Simplifying expressions using index laws	U662			
Algebra	Brackets	Expanding single brackets	U179			
Algebra	Brackets	Expanding double brackets	U768			
Algebra	Brackets	Expanding triple brackets	U606			
Algebra	Brackets	Factorising into one bracket	U365			
Algebra	Brackets	Factorising quadratic expressions	U178			
Algebra	Brackets	Factorising the difference of two squares	U963			
Algebra	Brackets	Factorising quadratic expressions 2	U858			
Algebra	Brackets	Completing the square	U397			
Algebra	Algebraic fractions	Simplifying algebraic fractions	U103			
Algebra	Algebraic fractions	Simplifying algebraic fractions by factorising	U437			
Algebra	Algebraic fractions	Simplifying algebraic fractions by factorising 2	U294			

Algebra	Algebraic fractions	Adding and subtracting algebraic fractions	U685			
Algebra	Algebraic fractions	Multiplying algebraic fractions	U457			
Algebra	Algebraic fractions	Dividing algebraic fractions	U824			
Algebra	Formulae	Changing the subjects of formulae	U556			
Algebra	Solving equations	Solving equations with two or more steps	U325			
Algebra	Solving equations	Solving equations: unknown on both sides	U870			
Algebra	Solving equations	Solving equations:unknown in denominator	U505			
Algebra	Solving equations	Constructing and solving equations	U599			
Algebra	Inequalities	Inequalities on number lines	U509			
Algebra	Inequalities	Solving single inequalities	U759			
Algebra	Inequalities	Solving inequalities: unknown on both sides	U738			
Algebra	Inequalities	Solving double inequalities	U145			
Algebra	Inequalities	Constructing and solving inequalities	U337			
Algebra	Inequalities	Graphs of linear inequalities	U747			
Algebra	Inequalities	Solving quadratic inequalities	U133			
Algebra	Quadratic equations	Factorising to solve quadratic equations	U228			
Algebra	Quadratic equations	Solving quadratic equations graphically	U601			
Algebra	Quadratic equations	Factorising to solve quadratic equations	U960			
Algebra	Quadratic equations	Solving equations completing the square	U589			
Algebra	Quadratic equations	Using the quadratic formula	U665			
Algebra	Quadratic equations	Constructing and solving quadratic equations	U150			
Algebra	Simultaneous equations	Solving simultaneous equation	U760			
Algebra	Simultaneous equations	Solving quadratic simultaneous equations	U547			
Algebra	Simultaneous equations	Simultaneous equations graphically	U836			
Algebra	Simultaneous equations	Solving graphical quadratic sim equations	U875			
Algebra	Iteration	Substituting into iterative formulae	U434			
Algebra	Iteration	Finding approximate solutions to equations	U168			
Algebra	Simultaneous equations	Constructing linear simultaneous equations	U137			
Algebra	Sequences	Substituting into position-to-term rules	U530			
Algebra	Sequences	Position-to-term arithmetic sequences	U498			
Algebra	Sequences	Position-to-term rules for patterns	U978			
Algebra	Sequences	Special sequences	U680			
Algebra	Sequences	Position-to-term geometric sequences	U958			
Algebra	Sequences	Position-to-term rules for quadratic sequences	U206			
Algebra	Sequences	Using recurrence relations	U171			
Algebra	Functions	Substituting into functions	U637			
Algebra	Functions	Substituting into composite functions	U895			
Algebra	Functions	Finding composite functions	U448			
Algebra	Functions	Finding inverse functions	U996			
Algebra	Graphs and coordinates	Reading and plotting coordinates	U789			
Algebra	Graphs and coordinates	Calculating midpoints	U933			
Algebra	Graphs and coordinates	Solving shape problems involving coordinates	U889			
Algebra	Graphs and coordinates	Plotting straight line graphs	U741			
Algebra	Graphs and coordinates	Finding equations of straight line graphs	U315			
Algebra	Graphs and coordinates	Interpreting equations of straight line graphs	U669			
Algebra	Graphs and coordinates	Finding the equation of a straight line	U477			
Algebra	Graphs and coordinates	Finding the equation of a straight line 2	U848			
Algebra	Graphs and coordinates	Equations of parallel lines	U377			
Algebra	Graphs and coordinates	Equations of parallel and perpendicular lines	U898			
Algebra	Non-linear graphs	Plotting graphs of quadratic functions	U989			
Algebra	Non-linear graphs	Interpreting graphs of quadratic functions	U667			

Algebra	Non-linear graphs	Graphs of cubic functions	U980			
Algebra	Non-linear graphs	Graphs of reciprocal functions	U593			
Algebra	Non-linear graphs	Find turning point by completing the square	U769			
Algebra	Non-linear graphs	Graphs of exponential functions	U229			
Algebra	Non-linear graphs	Translating graphs	U598			
Algebra	Non-linear graphs	Reflecting graphs	U487			
Algebra	Non-linear graphs	Transforming graphs	U455			
Algebra	Non-linear graphs	Estimating gradients using tangents	U800			
Algebra	Non-linear graphs	Estimating areas under non-linear graphs	U882			
Algebra	Non-linear graphs	Equations of circles and tangents	U567			
Algebra	Real-life graphs	Plotting linear real-life graphs	U652			
Algebra	Real-life graphs	Using and interpreting linear real-life graphs	U638			
Algebra	Real-life graphs	Finding equations of linear real-life graphs	U862			
Algebra	Real-life graphs	Sketch graphs of water flows	U896			
Algebra	Motion-time graphs	Plotting distance-time graphs	U403			
Algebra	Motion-time graphs	Interpreting distance-time graphs	U914			
Algebra	Motion-time graphs	Calculating speed from distance-time graphs	U462			
Algebra	Motion-time graphs	Plotting distance-time graphs using speeds	U966			
Algebra	Motion-time graphs	Plotting velocity-time graphs	U937			
Algebra	Motion-time graphs	Calculating distances from velocity-time graphs	U611			
Algebra	Algebraic proofs	Writing algebraic proofs	U582			
Ratio	Time	Reading, converting and calculating with time	U902			
Ratio	Measures	Converting units of length, mass and capacity	U388			
Ratio	Measures	Converting units of area	U248			
Ratio	Measures	Converting units of volume	U468			
Ratio	Measures	Problem solving: length, area and volume	U663			
Ratio	Measures	Using appropriate units	U497			
Ratio	Compound measures	Calculating with speed	U151			
Ratio	Compound measures	Calculating with rates	U256			
Ratio	Compound measures	Calculating with density	U910			
Ratio	Compound measures	Calculating with pressure	U527			
Ratio	Compound measures	Mixed problems: density and pressure	U842			
Ratio	Ratio	Writing and simplifying ratios	U687			
Ratio	Ratio	Usingt ratios to find unknown amounts	U753			
Ratio	Ratio	Converting between ratios, fractions and %	U176			
Ratio	Ratio	Sharing amounts in a given ratio	U577			
Ratio	Ratio	Combining ratios	U921			
Ratio	Ratio	Calculating with ratios and algebra	U676			
Ratio	Ratio	Changing ratios	U865			
Ratio	Ratio	Problem solving: Ratio (Higher)	U595			
Ratio	Proportion	Solving direct proportion word problems	U721			
Ratio	Proportion	Constructing direct proportion equations	U407			
Ratio	Proportion	Solving inverse proportion word problems	U357			
Ratio	Proportion	Constructing inverse proportion equations	U138			
Ratio	Proportion	Currency conversion	U610			
Ratio	Proportion	Interpreting direct proportion equations	U640			
Ratio	Proportion	Interpreting inverse proportion equations	U364			
Ratio	Proportion	Graphs of direct and inverse proportion	U238			
Geometry	Area and perimeter	Mixed problems: Area and perimeter	U993			
Geometry	Area and perimeter	Finding the area of compound shapes	U970			
Geometry	Area and perimeter	Finding the perimeter of compound shapes	U351			

Geometry	Area and perimeter	Problem Solving	U226			
Geometry	Area and perimeter	Finding the area of triangles	U945			
Geometry	Area and perimeter	Area of compound shapes containing triangles	U575			
Geometry	Area and perimeter	Finding the area of parallelograms	U424			
Geometry	Area and perimeter	Finding the area of trapeziums	U265			
Geometry	Area and perimeter	Problem Solving 2	U343			
Geometry	Shape properties	Line and shape properties	U121			
Geometry	Shape properties	Symmetry	U849			
Geometry	Shape properties	Properties of 3D shapes	U719			
Geometry	Angles	Understanding, measuring and drawing angles	U447			
Geometry	Angles	Angles on a line and about a point	U390			
Geometry	Angles	Vertically opposite angles	U730			
Geometry	Angles	Angles in triangles	U628			
Geometry	Angles	Angles in quadrilaterals	U732			
Geometry	Angles	Combining angle facts	U655			
Geometry	Angles	Angles on parallel lines	U826			
Geometry	Angles	Using quadrilateral properties to find angles	U329			
Geometry	Angles	Angles in polygons	U427			
Geometry	Trigonometry	Understanding sin, cos and tan	U605			
Geometry	Trigonometry	Finding sides in right-angled triangles	U283			
Geometry	Trigonometry	Finding angles in right-angled triangles	U545			
Geometry	Trigonometry	Using the exact values of trigonometric ratios	U627			
Geometry	Trigonometry	Using exact values of trig ratios (Higher)	U319			
Geometry	Trigonometry	Angles of elevation and depression	U967			
Geometry	Trigonometry	Calculating with trigonometry and bearings	U164			
Geometry	Trigonometry	Trigonometry in 3D shapes	U170			
Geometry	Trigonometry	Graphs of trigonometric functions	U450			
Geometry	Trigonometry	The sine rule	U952			
Geometry	Trigonometry	The cosine rule	U591			
Geometry	Trigonometry	The area rule	U592			
Geometry	Similarity & congruence	Understanding congruence	U790			
Geometry	Similarity & congruence	Understanding similarity	U551			
Geometry	Similarity & congruence	Mixed problems: similarity and congruence	U112			
Geometry	Similarity & congruence	Congruent triangles	U866			
Geometry	Similarity & congruence	Finding unknown sides in similar shapes	U578			
Geometry	Similarity and congruence	Finding the perimeter & area of similar shapes	U630			
Geometry	Similarity and congruence	Finding surface area & volume of similar shapes	U110			
Geometry	Circles	Identifying parts of circles	U767			
Geometry	Circles	Finding the circumference of circles	U604			
Geometry	Circles	Finding the area of circles	U950			
Geometry	Circles	Finding the arc length of sectors	U221			
Geometry	Circles	Finding the area of sectors	U373			
Geometry	Circle theorems	Angles subtended at the centre	U459			
Geometry	Circle theorems	Angles in segments and cyclic quadrilaterals	U251			
Geometry	Circle theorems	Circle theorems for chords and tangents	U489			
Geometry	Circle theorems	Alternate segment theorem	U130			
Geometry	Circle theorems	Mixed problems: Circle theorems	U808			
Geometry	Circle theorems	Proving the circle theorems	U807			
Geometry	Pythagoras' theorem	Using Pythagoras' theorem in 2D	U385			

Geometry	Plans and elevations	Nets of 3D shapes	U761			
Geometry	Plans and elevations	Plans and elevations	U743			
Geometry	Surface area	Finding the surface area of cubes and cuboids	U929			
Geometry	Surface area	Finding the surface area of prisms	U259			
Geometry	Surface area	Finding the surface area of pyramids	U871			
Geometry	Surface area	Mixed Surface Area	U142			
Geometry	Surface area	Finding the surface area of cylinders	U464			
Geometry	Surface area	Finding the surface area of cones	U523			
Geometry	Surface area	Finding the surface area of spheres	U893			
Geometry	Surface area	Mixed Surface Area 2	U771			
Geometry	Surface area	Finding the surface area of frustums	U334			
Geometry	Surface area	Finding the surface area of composite shapes	U561			
Geometry	Volume	Finding the volume of cubes and cuboids	U786			
Geometry	Volume	Finding the volume of prisms	U174			
Geometry	Volume	Finding the volume of pyramids	U484			
Geometry	Volume	Finding the volume of cylinders	U915			
Geometry	Volume	Finding the volume of cones	U116			
Geometry	Volume	Finding the volume of spheres	U617			
Geometry	Volume	Mixed problems: volume of cones & spheres	U426			
Geometry	Volume	Finding the volume of frustums	U350			
Geometry	Volume	Finding the volume of composite shapes	U543			
Geometry	Vectors	Understanding column vectors	U632			
Geometry	Vectors	Adding and subtracting column vectors	U903			
Geometry	Vectors	Multiplying column vectors by a scalar	U564			
Geometry	Vectors	Solving geometric problems using vectors	U781			
Geometry	Vectors	Identifying parallel vectors	U660			
Geometry	Transformations	Translation	U196			
Geometry	Transformations	Reflection	U799			
Geometry	Transformations	Rotation	U696			
Geometry	Transformations	Enlargement by a positive scale factor	U519			
Geometry	Transformations	Enlargement by positive or negative scale factor	U134			
Geometry	Transformations	Combining transformations	U766			
Geometry	Constructions and loci	Constructing triangles	U187			
Geometry	Constructions and loci	Constructing bisectors of angles	U787			
Geometry	Constructions and loci	Constructing perpendicular bisectors	U245			
Geometry	Constructions and loci	Mixed: bisectors and perpendicular lines	U979			
Geometry	Constructions and loci	Constructing loci	U820			
Geometry	Scale diagrams	Drawing and interpreting scale diagrams	U257			
Geometry	Bearings	Measuring and drawing bearings	U525			
Geometry	Bearings	Calculating bearings	U107			
Geometry	Geometric proofs	Geometric proofs with angle facts	U471			
Geometry	Geometric proofs	Proofs with congruence and similarity	U887			
Probability	Theoretical probability	Using probability phrases	U803			
Probability	Theoretical probability	Writing probabilities as fractions	U408			
Probability	Theoretical probability	Writing probabilities mixed	U510			
Probability	Theoretical probability	Probabilities of mutually exclusive events	U683			
Probability	Theoretical probability	Expected results from repeated experiments	U166			
Probability	Theoretical probability	Sample space diagrams	U104			
Probability	Theoretical probability	Venn diagrams	U476			
Probability	Theoretical probability	Venn diagrams with set notation	U748			

Probability	Theoretical probability	Using set notation	U296				
Probability	Theoretical probability	Frequency trees	U280				
Probability	Theoretical probability	Tree diagrams for independent events	U558				
Probability	Theoretical probability	Tree diagrams for dependent events	U729				
Probability	Experimental probability	Calculating experimental probabilities	U580				
Probability	Counting outcomes	Using the product rule for counting	U369				
Probability	Conditional probability	Conditional probabilities from tables	U246				
Probability	Conditional probability	Conditional probabilities from Venn diagrams	U699				
Probability	Conditional probability	Using the conditional probability formula	U821				
Probability	Conditional probability	Conditional probabilities from tree diagrams	U806				
Statistics	Averages and range	Calculating the range	U526				
Statistics	Averages and range	Calculating the median	U456				
Statistics	Averages and range	Finding the mode	U260				
Statistics	Averages and range	Calculating the mean	U291				
Statistics	Averages and range	Finding averages from frequency tables	U569				
Statistics	Averages and range	Finding averages from diagrams	U854				
Statistics	Averages and range	Finding averages from grouped data	U877				
Statistics	Averages and range	Which average?	U717				
Statistics	Frequency tables	Interpreting tables	U981				
Statistics	Frequency tables	Interpreting tables with grouped data	U312				
Statistics	Charts	Drawing and interpreting tally charts	U653				
Statistics	Charts	Drawing and interpreting pictograms	U506				
Statistics	Bar charts	Drawing bar charts	U363				
Statistics	Bar charts	Interpreting bar charts	U557				
Statistics	Pie charts	Drawing pie charts	U508				
Statistics	Pie charts	Interpreting pie charts	U172				
Statistics	Line graphs	Drawing line graphs	U590				
Statistics	Line graphs	Interpreting line graphs	U193				
Statistics	Scatter graphs	Plotting scatter graphs	U199				
Statistics	Scatter graphs	Interpreting scatter graphs	U277				
Statistics	Scatter graphs	Using lines of best fit	U128				
Statistics	Histograms	Drawing histograms	U814				
Statistics	Histograms	Interpreting histograms	U983				
Statistics	Histograms	Calculating averages from histograms	U267				
Statistics	Frequency polygons	Drawing and interpreting frequency polygons	U840				
Statistics	Cumulative frequency	Drawing cumulative frequency graphs	U182				
Statistics	Cumulative frequency	Interpreting cumulative frequency graphs	U642				
Statistics	Box plots	Drawing box plots	U879				
Statistics	Box plots	Interpreting box plots	U837				
Statistics	Box plots	Comparing using box plots and CF graphs	U507				
Statistics	Data	Types of data	U322				
Statistics	Data	Designing and using questionnaires	U911				
Statistics	Data	Collecting and recording data using tables	U120				
Statistics	Data	Presenting data and making conclusions	U571				
Statistics	Data	Comparing populations using diagrams	U520				

Resources to support revision:

Sparx Maths is a website you are familiar with. Type the code of the topic into the independent search box and tasks are shown for you to complete. If you get stuck on a question, click 'watch video' & a video shows you how to complete the question.

www.sparxmaths.com

Corbett maths contains videos, worksheets and exam questions on every topic at GCSE. The link is below:

www.corbettmaths.co.uk

One website that has past exam papers and exam questions on all topics is Maths Genie. The link is below:

http://www.mathsgenie.co.uk