MATHEMATICS: Year 11 Revision Timetable 2025
HIGHER TIER

Pupil Name:

BEST WAYS TO REVISE IN YOUR SUBJECT

- The only effective way to revise Maths is to DO MATHS – lots of practice questions
- Use the topic lists to select key skills that you need to practise
- Revise key points using the Corbett maths videos
- Answer practice questions from Corbett maths to make sure that you can apply your knowledge

USEFUL RESOURCES: As well as Corbett maths, you could use www.mathsgenie.co.uk, revision guides and your own notes in exercise books to support your revision.

Date	Topics	Tick when practised	What am I finding difficult
6/10/25	Key Skills Number Key Skills FDP & Ratio Key Skills Algebra		
13/10/25	Angles Pythagoras & Trigonometry Solving Equations		
20/10/25	Area, perimeter and volume Straight Line Graphs Sequences		
27/10/25 Half Term	Constructions Inequalities Probability		
03/11/25	Transformations Statistics Congruence & similarity		
10/11/25	Exam practice using past papers		

6/10/25

Key Skills - Number	Video number
Add, subtract, multiply and divide negative numbers	205,206,207
Add, subtract, multiply and divide decimals	90,91,94,92
Use BIDMAS for the order of operations	211
Understand the terms prime number, factor, multiple, square number, cube number, square root and cube root	225,216,220,226,228 212,214
Calculate powers and roots	172,228
Find the prime factor decomposition of a number	223
Find LCMs and HCFs	224
Round to decimal places and significant figures	279a, 278
Approximate the answer to a calculation by rounding to 1 significant figure	215
Calculate exactly when working with surds	305
Simplify surds	305
Rationalise the denominator of a fraction containing surds	307
Simplify and manipulate algebraic expressions containing surds including expanding brackets and factorising quadratic expressions.	308

Key Skills – FDP & Ratio	Video number
Simplify a fraction	146
Add, subtract, multiply and divide fractions including mixed numbers	132,133,134,142,139
Understand the term reciprocal	145
Change a terminating decimal to a fraction and vice versa	123
Change a recurring decimal to a fraction and vice versa	96
Order a list of fractions	144
Write a ratio in simplest form	269
Divide an amount into a given ratio	270
Solve problems involving ratio	270
Understand the relationship between ratios and fractions	269a
Calculate a percentage of an amount both with and without a calculator	234,235
Increase or decrease by a given percentage	238
Calculate simple interest	236a
Solve problems involving reverse percentages	240
Solve growth and decay problems including compound interest	236

Key Skills – Algebra	Video number
Use algebraic notation	19
Substitute values into expressions and formulae	20
Understand the terms expression, equation, formulae, identity, term and factor	
Simplify an expression by collecting like terms	9
Rearrange a formula to change the subject	7
Factorise Quadratics	118
Simplify expressions and algebraic fractions	24

13/10/25

Angles	Video number
Apply basic angle facts	30,35,39
Find and use the sum of angles for a given polygon	32
Find and use the properties of special quadrilaterals	33
Understand and use the correct terms for parts of a circle	61
Identify and apply circle definitions: centre, radius, chord, diameter, circumference, tangent, arc, sector, segment	
Apply the standard circle theorems and use them to prove related results	64,65
Prove the standard circle theorems	65a-f
Measure and draw bearings	26,27

Pythagoras and Trigonometry	Video number
Know and be able to apply Pythagoras' theorem	257
Know and be able to apply the trigonometric ratios for Sin Cos and Tan	329
Apply Pythagoras and Trigonometry to find angles and lengths in right angled triangles in 2D	330,331
Apply Pythagoras and Trigonometry to find angles and lengths in right angled triangles in 3D	259,332
Know the exact values of sinx, cosx and tanx for x = 0°, 30°, 45° , 60° or be able to find them using the special triangles	341

Solving Equations	Video number
Solve linear equations where the unknown appears on one or both sides	113
Solve a quadratic equation by factorising	266
Solve two linear simultaneous equations in two variables algebraically	295
Find approximate solutions of a pair of simultaneous equations using a graph	297
Plot a quadratic graph from a table of values	264
Find the roots of a quadratic from the graph	266
Solve a quadratic equation using the quadratic formula	267
Complete the square for a quadratic	10
Use the completed square form to solve a quadratic equation	267a
Use the completed square form to deduce the turning point of a quadratic graph	371
Solve a quadratic equation which requires rearranging into the form	
Solve a linear equation and a quadratic equation simultaneously	298
Use the above to find the intersection coordinates of a straight line and a curve including circles	298

20/10/25

Area and Perimeter	Video number
Calculate perimeters of 2D shapes, including circles	241, 62
Calculate areas of circles and composite shapes	47
Calculate arc lengths, angles and areas of sectors of circles	58.63
Know and apply formulae to calculate: area of triangles, parallelograms, trapezia;	44,48,49
Know the formulae: circumference of a circle and area of a circle	59, 60

Straight Line Graphs	Video number
Plot graphs of equations that are straight-line graphs using tables of values, gradient-intercept method or the cover-up method	186
Solve geometrical problems on coordinate axes	
Find the equation of the line through two given points	195
Find the equation of the line through one point with a given gradient	194
Use the form y = mx + c to identify perpendicular lines	197
Identify and interpret gradients and intercepts of linear functions graphically and algebraically	189
Recognise, sketch and interpret graphs of linear functions	187
Interpret the gradient of a straight-line graph as a rate of change	
Find the equation of the line through one point with a given gradient	194
Use the form y = mx + c to identify perpendicular lines	197
Identify and interpret gradients and intercepts of linear functions graphically and algebraically	189

Sequences	Video number
Continue a sequence	286
Generate terms of a sequence using the nth term	288
Continue a picture pattern	290
Recognise and use sequences of triangular, square and cube numbers and arithmetic progressions	287a
Recognise and use Fibonacci-type sequences, quadratic sequences and geometric progressions	
Find the nth term of linear sequences	288
Find the nth term of quadratic sequences	388

27/10/25

Constructions	Video number
Construct triangles with given measurements	81-83
Construct a perpendicular bisector of a line segment	78
Construct a perpendicular to a given line from a given point	79
Construct a perpendicular to a give line at a given point	80
Construct an angle bisector	72
Solve loci problems	75-77

Inequalities	Video number
Solve linear inequalities	178,179
Solve quadratic inequalities	378
Represent inequalities on a number line, using set notation and on a graph	177,180-182
Interpret and use maps and scale drawings	283
Construct scale drawings	283
Measure and draw bearings	26,27

Probability	Video number
Use the probability scale to relate relative expected frequency to theoretical probability	248
Know that the probabilities of exhaustive events sum to 1	250
Understand that increasing the number trials of an experiment will improve the accuracy of probability estimates	
Use tables, grids, Venn diagrams, tree diagrams and possibility (sample) spaces	252,246,380
Calculate probabilities of combined independent and dependent events	249
Understand conditional probability and how to calculate and represent graphically	247

3/11/25

Transformations	Video number

Be able to reflect shapes and describe a given reflection (i.e. give a line of reflection)	272,273
Be able to rotate shapes and describe a given rotation (i.e. give the centre of rotation, angle and direction)	275
Be able to translate shapes and describe a given translation using a vector	325,326
Be able to enlarge a shape, using positive integer scale factors	104
Be able to enlarge a shape, using negative integer scale factors	108
Be able to enlarge a shape, using fractional scale factors	107
Describe the effects of combining transformation including translations with column vectors	326,273,275, 105

Statistics	Video number
Interpret and construct frequency tables	54
Interpret and construct bar charts, pictograms, and vertical line charts	147,148,161,162
Calculate the median, mean, mode and modal class	50-55
Calculate the spread of data involving range (including consideration of outliers) and including quartiles and inter-quartile range	57
Construct and interpret histograms	157-159
Construct and interpret cumulative frequency diagrams	153,154
Construct and interpret box plots	149,150
Use and interpret scatter graphs	165,166
Recognise correlation and understand that it does not indicate causation	168
Draw lines of best fit and use them to make predictions	167
Interpret and construct tables, charts and diagrams	51,147, 148,148a, 148b
Interpret and construct pie charts	163,164

Congruence & Similarity	Video number
Understand and identify the conditions to define congruency e.g. SSS, SAS, ASA, RHS	67
Work out and then use the scale factor of similar shapes to find the length of a side	292
Apply knowledge of similar shapes in area and volume questions	293a,293b
Recall and convert metric units of length, area, volume and capacity	349abc,350,351
Solve problems involving speed	299
Solve problems involving density and pressure.	384,385
Interpret and use maps and scale drawings	283
Construct scale drawings	283