



Revising for Maths



Our number 1 recommendation for revising for Maths exams is to use Sparx. Sparx learns what you can and can't do, so it will give you the right questions to keep improving over time. Studies show results of a whole grade difference between students who use Sparx properly and those who don't!



Revision lists for Sparx codes and topics are provided on the next pages. There is also further guidance on how to use your knowledge organiser alongside Sparx to choose the right topics to revise.

Maths Genie

Another really useful website you can use is Maths Genie. It has Maths questions by topic with full worked solutions.

There is also lots of exam practice booklets on there which you can do from the screen and mark as you go. This can be useful alongside Sparx too by searching for codes in independent learning.

Corbett Maths is great for video tutorials on how to master each small element of every topic. The corbett maths video numbers are also listed in our Hele's knowledge organisers.



Corbettmαths

We recommend you save practice papers for completing in school unless your Maths teacher recommends a specific paper to do at home. This is to avoid doing the same work twice as we will be doing lots of papers throughout year 11.

If you have a Maths tutor outside of school, you should tell them what you can't do, and they should be planning sessions to meet your needs. Past papers will be covered in school so make sure you get your moneys worth from your sessions!

Knowledge Organiser Advice



Year 11 Foundation Knowledge Organisers 2025



1. Vectors
2. Geometric Reasoning
3. Bearings
4. Congruence
5. Construction and Loci

Every topic we teach is detailed with examples in your knowledge organiser. At the end of each topic, rate your understanding using the smiley faces, and then when the time comes to revise, go back and use the Sparx codes for the faces which you didn't rate as happy!

What do you need to be able to do?

Skill	Corbett Maths Video	Sparx Code	Can I do this?
Finding angles in different triangles	37	U628	😊 😐 😞
Knowing angle rules for different quadrilaterals	2, 33	U732	😊 😐 😞
Finding interior angles in polygons	32	U427	😊 😐 😞
Finding exterior angles of polygons	32	U427	😊 😐 😞

Complete the quizzes which are also provided for each topic. This will test your understanding and show you where the gaps in your knowledge may be. You may do quizzes in lessons too.

It is a good idea to go back and look at your year 10 knowledge organiser too!

Number

Topic	Topic code	R	A	G
Ordering positive integers	U600			
Ordering decimals	U435			
Ordering negative numbers	U947			
Adding and subtracting positive integers	U417			
Multiplying and dividing positive integers	U127, U453			
Adding and subtracting negative numbers	U742			
Multiplying and dividing negative numbers	U548			
Adding and subtracting decimals	U478			
Multiplying and dividing with place value	U735			
Multiplying and dividing with decimals	U293, U868			
Order of operations	U976			
Prime numbers, prime factorisation	U236, U739			
Factors, multiples, HCF and LCM	U211, U751, U529			
Powers and roots	U851			
Using standard form	U330, U534			
Calculating with standard form	U264, U290, U161			
Equivalent fractions and simplifying fractions	U704, U646			
Mixed numbers and improper fractions	U692			
Ordering fractions	U746			
Addition and subtraction of fractions	U736, U793			
Multiplication and division of fractions	U475, U544			
Converting and ordering fractions, decimals and percentages	U888, U594			
Fractions of amounts	U881, U916			
Percentages of amounts	U554, U349			
Percentage change	U773, U671			
Reverse percentages	U286, U278			
Simple interest	U533			
Rounding	U480, U298			
Rounding to significant figures	U731, U965			
Estimating answers	U225			
Value for money	M681			

Algebra

Topic	Topic code	R	A	G
Algebraic expressions	U613			
Collecting like terms	U105			
Substitution	U201, U585, U144			
Expanding brackets	U179, U768			
Factorising expressions	U365			
Index laws	U235, U694, U662, U103			
Changing the subject	U556			
Coordinates	U789, U889			
Midpoints	U933			
Plotting straight line graphs	U741			
Equations of straight line graphs	U315, U669			
Parallel lines	U377			
Distance-time graphs	U403, U914, U462, U966			
Quadratic graphs	U989, U667			
Linear equations	U755, U325, U870, U505, U599			
Quadratic expressions and equations	U178, U228			
Linear sequences	U213, U530, U498, U978			
Other sequences	U958, U680			

Ratio and proportion

Topic	Topic code	R	A	G
Simplifying ratios	U687			
Sharing amounts in a ratio	U753, U577			
Converting between ratios, fractions and percentages	U176			
Direct proportion	U721, U640			
Inverse proportion	U357, U364			
Proportion graphs	U238			
Units of measure: Length, Mass and Capacity	U102, U388			
Units of measure: Time	U902			
Units of measure: Area	U248			
Currency conversion	U610			
Conversion graphs	U652, U638, U862			
Compound units: Speed	U151			

Number

Topic	Topic code	R	A	G
Fractions	U224, U538, U793			
Factors, multiples and primes	U739, U250			
Percentage change	U671, U332, U988			
Standard form	U330, U534, U264, U290			
Error intervals	U657			

Algebra

Topic	Topic code	R	A	G
Linear equations	U325, U870, U599			
Linear inequalities	U759, U738, U145, U337			
Index laws	U662			
Linear simultaneous equations	U760, U757, U836, U137			
Linear graphs and coordinates	U315, U669, U477, U848, U377			
Quadratic graphs and equations	U989, U667, U228, U601			

Ratio and proportion

Topic	Topic code	R	A	G
Ratio	U687, U753, U176, U577, U921, U865			
Speed	U151			
Density and pressure	U910, U527			
Proportion	U721, U357, U610			

Geometry

Topic	Topic code	R	A	G
Area	U226, U343, U950			
Volume	U786, U174, U915			
Angles	U655, U826, U329, U427			
Pythagoras' theorem	U385			
Trigonometry	U605, U283, U545			
Transformations	U196, U799, U696, U519, U766			

Probability

Topic	Topic code	R	A	G
Calculating probabilities	U408, U510, U683, U580			
Expected outcomes	U166			
Tree diagrams	U558, U729			
Set notation	U748, U296			

Statistics

Topic	Topic code	R	A	G
Averages	U717, U569			
Averages with grouped data	U877			
Sampling	U162			
Scatter graphs	U199, U277, U128			
Frequency polygons	U840			

Number

Topic	Topic code	R	A	G
Calculating with roots and fractional indices	U851, U985, U772, U299			
Converting recurring decimals to fractions	U689			
Surds	U338, U663, U872, U499			
Rationalising the denominator	U707, U281			
Error intervals	U657, U301, U587			

Algebra

Topic	Topic code	R	A	G
Expanding triple brackets	U606			
Operations with algebraic fractions	U685, U457, U824			
Factorising quadratic expressions: ax^2+bx+c	U858			
Simplifying algebraic fractions	U294			
Factorising to solve quadratics equations	U228, U960			
Using the quadratic formula	U665			
Completing the square to solve quadratics	U397, U589			
Quadratic equations in context	U150			
Quadratic simultaneous equations	U547			
Index laws	U235, U694, U662			
Equation of a straight line: Perpendicular lines	U898			
Quadratic graphs: Turning points	U769			
Quadratic simultaneous equations on graphs	U875			
Exponential graphs	U229			
Exponential growth and decay problems	U988			
Trigonometric graphs	U450			
Graph transformations	U598, U487, U455			
Velocity-time graphs	U937, U562, U611			
Rate of change graphs	U638, U652, U862			
Estimating gradient from a curve	U800			
Estimating area under a curve	U882			
Equation of a circles and tangents	U567			
Linear inequalities as graph regions	U747			
Quadratic inequalities	U133			
Functions	U637, U895, U448, U996			
Recurrence relations	U171			
Quadratic sequences	U206			
Iteration and numerical methods	U434, U168			
Algebraic proof	U582			

Ratio and proportion

Topic	Topic code	R	A	G
Algebraic direct and inverse proportion	U407, U138			
Compound units: Density problem solving	U910			

Geometry

Topic	Topic code	R	A	G
Congruence proofs	U866, U887			
Enlargements	U134			
Describe combined transformations	U766			
Circle theorems: Angles inside a circle	U459, U251			
Circle theorems: Tangents and chords	U489, U130			
Circle theorems problems	U808			
Prove circle theorems	U807			
Volume of frustums	U350			
Volume: Problem solving	U543, U426			
Similar Shapes: Area and volume	U630, U110			
Pythagoras' Theorem in 2D and 3D	U385, U541			
Right-angled trigonometry: Problem solving	U319, U283, U545, U967			
3D trigonometry	U170			
The area rule	U592			
Sine rule	U952			
Cosine rule	U591			
Trigonometry and bearings	U164			
Vectors problems	U781, U560			

Probability

Topic	Topic code	R	A	G
Product rule for counting	U369			
Conditional probability	U246, U821, U806			
Probability from Venn diagrams	U476, U748, U699			

Statistics

Topic	Topic code	R	A	G
Averages	U877, U717			
Cumulative frequency diagrams	U182, U642			
Box plots	U879, U837, U507			
Frequency polygons	U840			
Histograms	U814, U983, U267			
Capture-recapture	U328			

Top Examiner Tips for GCSE Maths



1

Revise all the course content use our revision checklist to help.

2

Memorise the formulae. Use our poster to help.

3

Fuel your concentration. Eat properly before the exam and have some water on your desk.

4

Make sure you have the correct equipment listed on the front of the paper.

5

Read the question carefully.

6

Roughly allow one minute for each mark available.

7

Don't forget to show ALL the stages of your working.

8

Communicate your responses fully. Use the correct terminology.

9

Present and organise your work clearly.

10

Check your answers. Does it make sense?



Pearson