

A guide to revising Mathematics (Higher)

This is a step by step guide of how to revise for your Mathematics GCSE examination

- Use a spare writing book or ring binder to keep all your revision notes and working.
- Choose a topic to revise from the list on the next page. Remember to choose those topics you are **not** confident with.
- Use the mathswatch clip and/or a revision guide to work through the topic, **making notes in your writing book and highlighting key formula**. Use a mind map if you prefer.
- Practise the questions provided on maths watch, or there are loads of practice questions, by topic, available on **corbettmaths.com**
- Go to the shared google document and go into the file 'foundation revision pack'. Choose the test on the topic you have just revised (the revision list tells you the name of the file). Work through the questions and check your answers from the mark scheme provided. **It is important to find out where you have gone wrong if you don't get the correct answer.**
- Tick the box on your revision list to say you have revised and practised the topic.
- More questions are available in the shared document for extra practise. Paper copies are available from your maths teacher.
- Repeat this process, for the topics you are not confident with, at least twice.
- Finally, work through the AQA topic tests and past papers that are on the shared google document.

The login for maths watch is

www.vle.mathswatch.com

The login details are

User : **student email address** (eg. *tsmith@wellacre*)

Password : **wellacre**

Higher Mathematics Revision List

Topic	Mathswatch clip number	Basic Skills	Exam Questions Higher revision pack practise questions (available in shared google doc)
NUMBER			
Four Operations + - x ÷	17, 18, 19, 20, 21, 22		
Negative numbers	23, 68		
Rounding Upper and lower Bounds	31, 32, 90, 91, 132, 155, 206		
BIDMAS	75		
Ordering and calculating with decimals	66, 67		
Primes Factors Multiples	28		
HCF LCM Prime Factors	78, 79, 80		
Fractions + - x ÷	24, 25, 26, 27, 70, 71, 73, 74		

Fraction of amount/express as a fraction	72		
Converting between Fractions Decimals and Percentages	84, 85		
Recurring Decimals	177, 189		
Percentage of a Quantity	40, 86, 87		
Express as a percentage	88, 89		
Percentage Change	109		
Increase/Decrease by a %	108, 111		
Repeated % Change	164		

Reverse %	110		
Ratio and Proportion	38, 39, 42, 106		
Direct and Inverse Proportion	199		
Best Buys	41		
Powers Roots and Indices	81, 82, 131, 154, 188		
Surds	207		

Standard Form	83		
ALGEBRA		Basic Skills	Exam questions
Co-ordinates	8, 113		
Expanding and Simplifying	33, 34, 35, 93, 134,		
Factorising	94		
Forming Formulae and Equations	137		
Linear Equations	135		
Binomial Expansion	178		
Quadratic Factorisation	157		
Changing Subject of a formula	101, 136, 190		

Function machines and substitution	36, 95		
Functions	214, 215		
Number Patterns and Sequences	37, 102 103, 104, 163, 213		
Linear Graphs	96, 97, 133,		
$Y = mx + c$	159, 208		
Quadratic graphs	98, 160		
Other Graphs	161, 194		
Transformation of Graphs	196		

Distance Time Graph	143		
Velocity Time Graphs	216		
Inequalities and Regions	138, 139, 198, 212		
Quadratic Equations	157, 158, 191, 192, 209		
Simultaneous Equations	140, 162		
Simultaneous Equations non linear	211		
Algebraic Fractions	210		

Iteration	179, 180		
Algebraic Proof	193		
Equation of a Circle	197		
GEOMETRY		Basic Skills	Exam questions
Properties of Shapes	9, 10,		
Symmetry and tessellations	11, 12		
Circles	116, 117, 118, 149, 167		
Circle Theorems	183, 184		
Angles	13, 45, 46, 120, 121, 122, 123		

Transformations	48, 49, 50, 148, 181, 182		
Constructions and Loci	47, 145, 146, 147, 165		
Nets plans Elevations	44, 51		
Metric conversions	112		
Compound Units	142		
Area and Perimeter	52, 53, 54, 55, 56		
Properties of Solids	43,		
Volume and Surface Area	114, 115, 119, 169,		

	170, 171, 172,		
Congruence and Similar Shapes	144, 166		
Similarity – Area and Volume	200		
Pythagoras basic and 3D	150, 217		
Trigonometry Basic and in 3D	168, 173, 218		
Trigonometry Advanced	201, 202, 203		

Trig Graphs	195		
Vectors	174, 219		
STATISTICS		Basic Skills	Exam Questions
Probability	14, 57, 58, 59, 60, 61, 125, 126, 151, 175, 204		
Data Collection and Sampling	63, 152, 176,		

Scatter Graphs	129		
Statistical Diagrams	15, 16, 64, 65, 128		
Venn Diagrams	127, 185		
Averages and Spread	62, 130		

Cumulative Frequency	186		
Box Plots	187		
Histograms	205		