

Mathematics – making revision effective

- Every year, 10% of students miss out by 3 marks or less.
- These are the same key strategies shared last year, and at parent info evening, and in class.
- Last year 75% of pupils scored at least one grade Higher in the summer than in their mocks.



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Mathematics – making revision effective

- Using revision lists (Corbett maths).
- Using books/topic tests/mocks/past papers.
- Using Sparx.
- Free from distractions!



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Mathematics – making revision effective

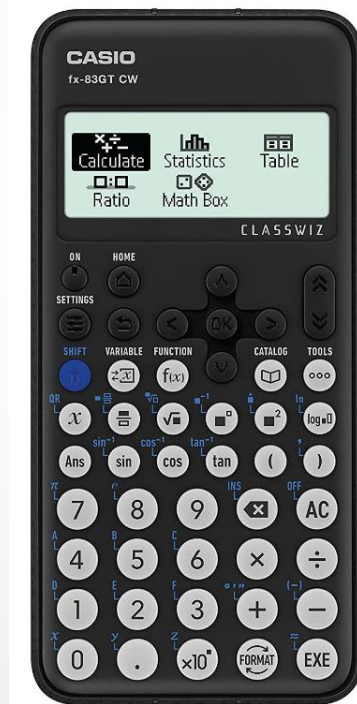
- Treat every practise paper like it is your real exam.

- Black pen (either ink or ball-point – no erasable pens as they can fade with heat!)
- Clear pencil case
- Clear water bottle with no labels
- Pencils (and an eraser and sharpener!)
- Scientific calculator (make sure to remove the lid if you have one)
- A ruler, pair of compasses, and protractor (or any mathematical instrument set)



Mathematics – making revision effective

- Treat every practise paper like it is your real exam.



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GCSE Foundation Tier Checklist

AQA

Angle Facts - Video 35, 30, 34, 39
Types of Angle - Video 38
Angles in Parallel Lines - Video 25
Angles in a Triangle - Video 37
Angles in a Quadrilateral - Video 33
Angles in Polygons - Video 32
Bearings - Videos 26, 27
Scales & Maps - Video 283
Perimeter - Video 241
Area of Rectangles/Triangles - Videos 45, 49
Area of a Trapezium - Video 48
Units - Videos 347, 349
Sensible Estimates - Video 285
Line Symmetry - Video 316
Rotational Symmetry - Video 317
Constructions - Videos 72, 78, 83
Loci - Videos 75, 76, 77
Faces, Edges, Vertices - Videos 5, 3
Nets - Video 4
Views and Elevations - Video 354
Time Calculations - Video 322
Timetables - Video 320
Distance Charts - Video 318
Speed, Distance, Time - Video 299
Travel Graphs - Video 171
Density - Video 384
Pressure - Video 385
Translations - Video 325, 326
Reflections - Videos 272, 273
Rotations - Video 275
Enlargements - Videos 104, 105, 107
Parts of the Circle - Video 61
Circumference - Video 60, 243
Area of a Circle - Video 59, 47
Arc Length - Video 58
Area of a Sector - Video 46
Volume of a Cylinder - Video 357
Pythagoras - Video 257
Trigonometry - Videos 329, 330, 331
Exact Trig Values - Video 341
Similar Shapes (sides) - Video 292
Congruent Triangles - Video 67
Volume of a Cuboid/Prism - Video 355, 356
Volume of a Sphere/Cone - Videos 359, 361
Surface Area - Video 310
Surface area of Sphere/Cone - Videos 313, 314
Vectors - Video 353a, 353

Multiplication - Video 199, 200
Division - Video 98
Addition - Video 6
Subtraction - Video 304
Rounding - Video 276, 277a, 277b, 278, 280
Estimation - Video 215
Order of Operations - Video 211
Ordering Decimals - Video 95
Arithmetic with Decimals - Videos 90, 91, 92, 93, 94
Multiples and Factors - Videos 220, 216
Prime Numbers - Video 225
Square Numbers and Square Roots - Videos 226, 228
Cube Numbers and Cube Roots - Videos 212, 214
Product of Primes - Video 223
LCM/HCF - Videos 218, 219, 224
Indices - Videos 172, 174
Negative Indices - Video 175
Standard Form - Video 300, 302, 303
Fractions of Amounts - Video 137
Adding Fractions - Video 133
Multiplying Fractions - Video 142
Dividing Fractions - Video 134
Reciprocals - Video 145
Fractions, Decimals, Percentages - Videos 121 to 129
Expressing as Fraction or % - Videos 136, 237
Percentages of Amounts - Videos 234, 235, 238
Percentage Change - Video 233
Simple Interest - Video 236a
Compound Interest - Video 236
Reverse Percentages - Video 240
Ratio - Videos 269, 270, 271
Currency - Video 214a
Recipes - Video 256
Negative Numbers - Videos 205-209
Place Value - Video 222, 222a
Error Intervals - Video 377
Money - Video 400
Best Buys - Video 210
Proportion - Videos 255a, 254
Use of a Calculator - Video 352

Tally Charts - Video 321
Frequency Trees - Video 376
Two-way Tables - Video 319
Pictograms - Videos 161, 162
Bar Charts - Videos 147, 148
Line Graphs - Video 160
Pie Charts - Video 163, 164
Probability - Videos 245, 246, 248
Relative Frequency - Video 248
Listing Outcomes - Video 253
Scatter Graphs - Videos 165 to 168
Averages & Range - Videos 56, 50, 53, 57
Mode: Frequency Table - Video 56a
Median: Frequency Table - Video 51
Combined Mean - Video 53a
Estimated Mean - Video 55
Venn Diagrams - Video 380
Tree Diagrams - Video 252
Reading Tables - Video 387
Samples - Video 281a
Coordinates - Video 84
Function Machine - Video 386
Writing Expressions - Video 16
Collecting Like Terms - Video 9
Multiplying & Dividing Terms - Videos 18, 11
Laws of Indices - Video 174
Sequences - Videos 286, 287, 290, 287a
Geometric Progressions - Video 375
The nth Term - Video 288
Expanding Brackets - Videos 13, 14
Factorising - Video 117
Factorising Quadratics - Videos 118, 120
Solving Equations - Video 110, 113, 266
Forming Equations - Videos 114, 115
Inequalities - Videos 177, 178, 179
Conversion Graphs - Video 151
Drawing Linear Graphs - Video 186
 $y = mx + c$ - Video 191
Gradient - Video 189
Real Life Graphs - Video 171a
Parallel graphs - Video 196
Substitution - Video 20
Changing the Subject - Video 7
Simultaneous Equations - Videos 295, 297
Quadratic Graphs - Video 264
Cubic Graphs - Video 344
Reciprocal Graphs - Video 346



Adding Fractions - Video 133
 Multiplying Fractions - Video 142
 Dividing Fractions - Video 134
 Reciprocal - Video 145
 Decimals - Video 90, 91, 92, 93, 94
 Use of a Calculator - Video 352
 Estimation - Video 215
 Best Buys - Video 210
 Currency - Video 214a
 Conversion Graphs - Video 151, 152
 LCM/HCF - Videos 218, 219
 Product of Primes - Videos 223, 224
 Indices - Videos 172, 174
 Indices (fractional/negative) - Videos 173, 175
 Standard Form - Videos 300, 301, 302, 303
 Percentages of Amounts - Videos 234, 235, 238
 Percentage change - Video 233
 Simple Interest - Video 236a
 Compound Interest - Video 236
 Reverse Percentages - Video 240
 Recurring Decimals to Fractions - Video 96
 Ratio - Videos 270, 271, 271a, 271b, 271c
 Direct Proportion - Video 254
 Inverse Proportion - Video 255
 Proportional Graphs - Video 255b
 Proportion (application) - Video 255c
 Limits of Accuracy - Videos 183, 184
 Surds - Videos 305, 306, 307, 308
 Product Rule for Counting - Video 383
 Error Intervals - Video 377, 280
 Collecting Like Terms - Video 9
 Expanding Brackets - Videos 13, 14, 15
 Factorising - Video 117
 Factorising Quadratics - Videos 118, 119, 120, 119a
 Algebraic Fractions - Videos 21, 22, 23, 24
 Sequences (nth term) - Videos 288, 289
 nth term (quadratics) - Video 388
 Substitution - Video 20
 Equations - Videos 110, 113, 114, 115
 Changing the Subject - Videos 7, 8
 Inequalities - Videos 177, 178, 179
 Inequalities (Regions) - Video 182
 Quadratic Inequalities - Video 378
 Linear Graphs - Videos 191, 186, 189, 194
 Midpoint of a Line - Video 198
 Distance between 2 points - Video 185
 Real-life Linear Graphs - Video 171a
 Parallel or Perpendicular Lines - Videos 196, 197
 Simultaneous Equations - Video 295
 Non-linear Simultaneous Equations - Video 298
 Graphical Simultaneous Equations - Video 297

www.corbettmaths.com/contents

AQA GCSE Higher Tier Checklist

Angles in Parallel Lines - Video 25, 39
 Bearings - Video 26, 27
 Angles in Polygons - Video 32
 Constructions - Video 78, 72, 79, 80, 70
 Loci - Videos 75, 76, 77
 Views - Video 354
 Area of a Trapezium - Video 48
 Circumference - Video 60
 Area of a Circle - Video 40
 Arc Length - Video 58
 Area of a Sector - Video 48
 Volume of a Cylinder - Video 357
 Pythagoras - Video 257, 259
 Trigonometry - Videos 329, 330, 331
 3D Trig and Pythagoras - Videos 259, 332
 Exact Trig Values - Video 341
 Volume of a Prism - Video 356
 Volume of Cone/Pyramid/Sphere - Videos 359-361
 Volume of a Frustum - Video 360a
 Surface Area of a Prism - Video 311
 Surface Area of Cone/Sphere - Videos 314, 313
 Metric Units (area/volume) - Videos 350, 351
 Translations - Video 325
 Reflections - Video 272
 Rotations - Video 275
 Enlargements - Videos 104, 106, 107, 108
 Similar Shapes - Videos 292, 293a, 293b
 Circle Theorems - Videos 64, 65
 Sine Rule - Video 333
 Cosine Rule - Videos 335, 336
 1/2abSinC - Video 337
 Vectors - Video 353
 Column Vectors - Video 353a
 Travel Graphs - Video 171
 Speed, Distance, Time - Video 299
 Density - Video 384
 Pressure - Video 385
 Geometric Proof - Video 366
 Congruent Triangles - Video 67
 Invariant Points - Video 392

Frequency Trees - Video 376
 Two-way Tables - Video 319
 Pie Charts - Videos 163, 164
 Scatter Graphs - Videos 165, 166
 Histograms - Video 157, 158, 159
 Cumulative Frequency - Videos 153, 154
 Box Plots - Video 149
 Quartiles - Video 57a
 Estimated Mean - Video 55
 Combined Mean - Video 53a
 Median (frequency table) - Videos 51, 52
 Modal class (frequency table) - Video 56a
 Probability - Video 250
 Relative frequency - Video 248
 Samples - Video 281a
 Tree Diagrams - Video 252
 Conditional Probability - Video 247
 Venn Diagrams - Video 380
 Equation of a Circle - Video 12
 Equation of a tangent - Video 372
 Instantaneous rates of change - Video 390a
 Average rates of change - Video 390b
 Area under a curve - Video 389
 Composite Functions - Video 370
 Inverse Functions - Video 369
 Quadratic Graphs - Video 264
 Solving Quadratics Graphically - Videos 367c, 367d
 Sketching Quadratics - Video 265
 Trigonometric Graphs - Videos 338, 339
 Cubic Graphs - Video 344
 Reciprocal Graphs - Video 346
 Exponential Graphs - Video 345
 Geometric Sequences - Video 375
 Algebraic Proof - Video 365
 Quadratic Formula - Video 267
 Completing the Square - Video 10, 371
 Transformations of Graphs - Video 323, 324
 Identities - Video 16a
 Iteration - Video 373, 373a, 373b



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Mathematics – going the extra mile

- Videos, questions and worked solutions – prioritise what you need to work on, not what you can already do.

1. Work out, as a simplified fraction.

$$\frac{3}{4} + \frac{1}{12}$$

.....
(2)

1. Work out, as a simplified fraction.

$$\frac{3}{4} + \frac{1}{12} = \frac{9}{12} + \frac{1}{12} = \frac{10}{12} = \frac{5}{6}$$

.....
(2)



Mathematics – going the extra mile

- Use your books and topic tests to support you.
- Every topic test is written from past paper questions, broken down by skill and scored as a percentage to help you compare and prioritise.



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Mathematics – going the extra mile

TOPIC TEST: Year 7 Higher 2. Number Skills

Calculators allowed on Q8 & 9 only

Score 18 / 24 75 %

Question	Skill	My Score / Out Of
Q1 – Q2	Understand factors, multiples, HCF and LCM	6 / 6
Q3	Calculate with negative numbers	4 / 4
Q4	Use mental and written strategies for multiplication	4 / 4
Q5	Use mental and written strategies for division	1 / 1
Q6	Carry out calculations involving squares, cubes, square roots and cube roots.	0 / 3
Q7	Estimate a calculation by rounding	0 / 3
Q8 – Q9	Use a scientific calculator accurately	3 / 3
	Total	18 / 24



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Mathematics – going the extra mile

Topic test - worked solution

Q3. This angle is measured to the nearest degree. Use trigonometry to work out the maximum possible value of length x , to 2 decimal places.

Not drawn accurately

S^oHc^AHT^oA

$$71.5 \leq x < 72.5$$

$\sin \theta = \frac{o}{h}$
 $\sin 73 = \frac{8}{x}$
 $8 \sin 73 = x$
 $x = 7.63$

Answer 7.63 cm (Total 3 marks)

- 1- Start by labelling the triangle
- 2- Then find the bounds for the angle
- 3- Then use S^oHc^AH^To^A to pick which calculation to use
- 4- Do the calculation in this case Sin
- 5- calculate answer and write answer

What mistake did you make?

The mistake I made was not reading the question correctly and therefore not using bounds in my angle calculation.

e.g rounded to nearest ten
 5 down \swarrow $75 \leq x < 85$ \searrow 5 up

Impact check

This hypotenuse is measured to the nearest centimetre. Use trigonometry to work out the maximum possible value of length x , to 2 decimal places.

Not drawn accurately

S^oHc^AHT^oA

$$7.5 \leq x < 8.5$$

$\sin \theta = \frac{o}{h}$
 $\sin 73 = \frac{8}{x} \Rightarrow x = 8.5$
 $8.5 \sin 73 = x$
 $x = 8.08$

Answer 8.08 cm



Mathematics – going the extra mile

- All AQA papers available online, walkthroughs on youtube.
- [AQA | Find past papers and mark schemes](#)
- We have used the papers from 2021 onwards – all the papers 17-20 are available for practise.

Subject	Mathematics	▼
Qualification	GCSE	▼
Specification	Mathematics (8300)	▼
Series	All available series	▼



Mathematics – going the extra mile

- You can access grade boundaries from when these were live papers, but use with caution.
- We don't know where the boundaries will land this summer – we do know that more marks will equal a better grade.
- We know that there are a certain number of grades at each level available.
- Control the controllable!



Mathematics Assessment Feedback

Paper November 2019 Paper 1F
 Name Joe Bloggs
 Teacher Mr Stewart

sparx

Questions	Topic	Score	Sparx Code
1	Understanding and ordering decimals	1 / 1	U435
2	Solving equations with one step	1 / 1	U755
3	Fractions, decimals and percentages	0 / 1	U594,U888
4	Calculating with roots and powers	1 / 1	U851
5	Using a written method to multiply integers	1 / 3	U127
6a	Interpreting bar charts	0 / 1	U557
6b	Interpreting bar charts	1 / 1	U557
6c	Interpreting bar charts	1 / 1	U557
6d	Drawing bar charts	2 / 2	U363
7a	Using a written method to divide with decimals	1 / 1	U868
7b	Multiplying and dividing with place value, Using a written method to multiply decimals	1 / 1	U735,U293
8a	Adding and subtracting decimals	2 / 2	U478
8b	Adding and subtracting decimals	2 / 2	U478
9	Using a written method to multiply decimals	2 / 2	U293
10	Multiplying and dividing with place value, Understanding and ordering integers	0 / 3	U735,U600
11a	Writing probabilities as fractions	1 / 1	U408
11b	Writing probabilities as fractions	0 / 2	U408
12	Constructing fractions, Constructing and solving equations	2 / 3	U163,U599
13	Rounding integers, Rounding decimals, Estimating calculations	2 / 2	U480,U298,U225
14	Area and perimeter, Writing and simplifying ratios	3 / 3	U993,U687
15	Angles on a line and about a point	3 / 3	U390
16	Calculating with roots and powers	0 / 1	U851
17	Plotting straight line graphs	2 / 3	U741
18a	Constructing fractions	2 / 2	U163
18b	Finding percentages of amounts without a calculator	3 / 3	U554
19a	Writing and simplifying ratios	1 / 1	U687
19b	Writing and simplifying ratios	1 / 1	U687
20	Writing probabilities as fractions, Probabilities of mutually exclusive events	1 / 1	U408,U683
21	Solving equations with the variable on both sides	2 / 3	U870
22	Sharing amounts in a given ratio, Angles in triangles	2 / 4	U577,U628
23	Types of data	1 / 1	U322
24a	Reflection	1 / 1	U799
24b	Rotation	1 / 1	U696
25a	Position-to-term rules for geometric sequences	0 / 1	U958
25b	Special sequences	0 / 2	U680
26	Simplifying algebraic fractions by cancelling, Substitution into formulae	2 / 2	U103,U585
27	Index rules with positive indices	3 / 3	U235
28	Finding the volume of cylinders, Finding the volume of spheres	0 / 4	U915,U617
29	Sharing amounts in a given ratio	4 / 4	U577
30a	Multiplying and dividing numbers in standard form	2 / 2	U264
30b	Adding and subtracting numbers in standard form	0 / 2	U290
31	Interpreting inverse proportion equations	1 / 1	U364
Total		56 / 80	



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Mathematics – going the extra mile

- Getting the most from Sparx – use your q by qs to target skills you need to improve upon.
- Sparx can produce unlimited extra, personalised practise for you to help revise and prepare for exams.



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Mathematics – making revision effective

- Using revision lists (Corbett maths).
- Using books/topic tests/mocks/past papers.
- Using Sparx.
- Focus on the areas where you can gain marks rather than where you are consolidating marks you already got.



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Mathematics – making revision effective

- Put the time in now – you get it paid back!
- ‘Great things don’t come from comfort zones’



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