

Dene Magna Mathematics Department

Mathematics Teachers of Year 11

- Elaine Turner (Head of Maths)
- Paul Manns (Deputy Head of Maths)
- Steven Jones
- Ashley James
- Gemma Laskey
- Rhiannon Ray

Celebration Time

- 2017 results were the best results Dene Magna has ever achieved.
- 81.3% of students achieved grade 4 or better. This is the grade that students need for entry to college, most sixths forms, apprenticeships or employment.
- Students made ***Outstanding Progress***

Exam Board

- AQA
- Link to past papers and mark schemes
- [Click here for exam board past papers and mark schemes](#)

www.vle.mathswatch.com

- Internet based revision, assignments
- Videos, worksheets and answers

student school
login
@denemagna
volume

11 ET box plots ILT

[Return to Assigned Work](#)

Overview

1 2 3 4 5 6

Question Progress

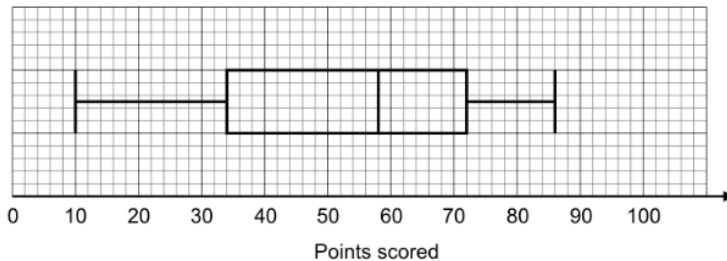
4 / 4 Marks

Homework Progress

15 / 15 Marks



This box plot shows information about the marks scored in a test.



- What was the median number of marks scored?
- What was the interquartile range of the marks?
- What was the range of the marks?

a) Median is 58 + marks

b) I.R. is 38 + marks

c) Range is 76 + marks

[Submit Answer](#)

Boxplots

[View One Minute Version](#)

Overview


Clip 187


BOXPLOTS

11 ET box plots ILT





WATCH the clip then do the assignment

MathsWatch list of clips

MathsWatch - Revision lessons just a click away ...	
Subject Content	Grade 1
Number	Place Value 1
Algebra	Ordering Integers 2
	Multiplying Integers 3
	Ordering Decimals 3
	Reading Scales 4
Ratio, Proportion, Rates of Change	Simple Mathematical Notation 5
Geometry and Measures	Interpreting Real-Life Tables 6
Probability and Statistics	Introduction to Algebraic Conventions 7
	Coordinates 8
Grades that will be examined:	Simple Geometric Definitions 9
Higher	Polygons 10
Foundation	Symmetries 11
	Tessellations and Congruent Shapes 12
	Names of Angles 13
	The Probability Scale 14
	Tally Charts and Bar Charts 15
	Pictograms 16
You will find some formulas and information in this insert.	
It will be very helpful to learn it all, off-by-heart for your exam.	
Area of a circle = πr^2	
Circumference of a circle = $2\pi r$	
	

MathsWatch - Revision lessons just a click away ...	
Grade 2	
Adding Integers and Decimals 17	Properties of Solids 43
Subtracting Integers and Decimals 18	Nets 44
Angles on a Line and at a Point 19	Angles on a Line and at a Point 45
Measuring and Drawing Angles 20	Measuring and Drawing Angles 46
Drawing a Triangle Using a Protractor 21	Drawing a Triangle Using a Protractor 47
Reflections 22	Reflections 48
Rotations 23	Rotations 49
Translations 24	Translations 50
Plans and Elevations 25	Plans and Elevations 51
Perimeters 26	Perimeters 52
Area of a Rectangle 27	Area of a Rectangle 53
Area of a Triangle 28	Area of a Triangle 54
Area of a Parallelogram 29	Area of a Parallelogram 55
Area of a Trapezium 30	Area of a Trapezium 56
Frequency Trees 31	Frequency Trees 57
Listing Outcomes 32	Listing Outcomes 58
Calculating Probabilities 33	Calculating Probabilities 59
Mutually Exclusive Events 34	Mutually Exclusive Events 60
Two-Way Tables 35	Two-Way Tables 61
Averages and the Range 36	Averages and the Range 62
Data - Discrete and Continuous 37	Data - Discrete and Continuous 63
Vertical Line Charts 38	Vertical Line Charts 64
Frequency Tables and Diagrams 39	Frequency Tables and Diagrams 65
Area of a triangle = $\frac{b \times h}{2}$	
Area of trapezium = $\frac{1}{2}(a+b)h$	
Prime Numbers	
2, 3, 5, 7, 11, 13, 17, 19, 23, 29, ...	
Each prime number has exactly two factors.	

MathsWatch - Revision lessons just a click away ...	
Grade 3	
Multiplying Decimals 66	Sketching Functions 99
Dividing Decimals 67	Solving Equations Using Flowcharts 100
Four Rules of Negatives 68	Subject of a Formula Using Flowcharts 101
Listing Strategies 69	Generate a Sequence from nth Term 102
Comparing Fractions 70	Finding the nth Term 103
Adding and Subtracting Fractions 71	Special Sequences 104
Finding a Fraction of an Amount 72	Exchanging Money 105
Multiplying Fractions 73	Sharing Using Ratio 106
Dividing Fractions 74	Ratios, Fractions and Graphs 107
Reciprocals 75	Increase/Decrease by a Percentage 108
Calculator Questions 76	Percentage Change 109
Product of Primes 77	Reverse Percentage Problems 110
Highest Common Factor (HCF) 78	Simple Interest 111
Lowest Common Multiple (LCM) 79	Metric Conversions 112
Squares, Cubes and Roots 80	Problems on Coordinate Axes 113
Working with Indices 81	Surface Area of a Prism 114
Standard Form 82	Volume of a Cuboid 115
Decimals and Fractions 83	Circle Definitions 116
Fractions, Percentages, Decimals 84	Area of a Circle 117
Percentage of an Amount (Calc.) 85	Circumference of a Circle 118
Percentage of an Amount (Non-Calc.) 86	Volume of a Prism 119
Change to a Percentage (Calc.) 87	Angles and Parallel Lines 120
Change to a Percentage (Non-Calc.) 88	Angles in a Triangle 121
Rounding to Significant Figures 89	Properties of Special Triangles 122
Estimating Answers 90	Angle Sum of Polygons 123
Using Place Value 91	Bearings 124
Expanding Brackets 92	Experimental Probabilities 125
Simple Factorisation 93	Possibility Spaces 126
Substitution 94	Venn Diagrams 127
Straight Line Graphs 95	Representing Data 128
The Gradient of a Line 96	Scatter Diagrams 129
Drawing Quadratic Graphs 97	Averages From a Table 130

MathsWatch - Revision lessons just a click away ...	
Grade 4	Grade 5
Index Notation 131	Negative Indices 154
Introduction to Bounds 132	Error Intervals 155
Midpoint of a Line on a Graph 133	Mathematical Reasoning 156
Expanding and Simplifying Brackets 134	Factorising and Solving Quadratics 157
Solving Equations 135	The Difference of Two Squares 158
Rearranging Simple Formulae 136	Finding the Equation of a Straight Line 159
Forming Formulae and Equations 137	Roots and Turning Points of Quadratics 160
Inequalities on a Number Line 138	Cubic and Reciprocal Graphs 161
Solving Linear Inequalities 139	Simultaneous Equations Algebraically 162
Simultaneous Equations Graphically 140	Geometric Progressions 163
Fibonacci Sequences 141	Compound Interest and Depreciation 164
Compound Units 142	Loi 165
Distance-Time Graphs 143	Congruent Triangles 166
Similar Shapes 144	Sectors of a Circle 167
Bisecting an Angle 145	Trigonometry 168
Constructing Perpendiculars 146	Spheres 169
Drawing a Triangle Using Compasses 147	Pyramids 170
Enlargements 148	Cones 171
Tangents, Arcs, Sectors and Segments 149	Frustums 172
Pythagoras' Theorem 150	Exact Trigonometric Values 173
Simple Tree Diagrams 151	Introduction to Vectors 174
Sampling Populations 152	Harder Tree Diagrams 175
Time Series 153	Stratified Sampling 176
The Laws of Indices	Pythagoras
$x^a \times x^b = x^{a+b}$	$a^2 + b^2 = c^2$
$x^a \div x^b = x^{a-b}$	
$(x^a)^b = x^{ab}$	
$x^a = \frac{1}{x^{-a}}$	
Trigonometry	
	
	

MathsWatch - Revision lessons just a click away ...	
Grade 6	Grades 8 and 9
Recurring Decimals to Fractions 177	Upper and Lower Bounds 206
Product of Three Binomials 178	Surds 207
Iteration - Trial and Improvement 179	Perpendicular Lines 208
Iterative Processes 180	Completing the Square 209
Enlargement - Negative Scale Factor 181	Algebraic Fractions 210
Combinations of Transformations 182	Simultaneous Eqs with a Quadratic 211
Circle Theorems 183	Solving Quadratic Inequalities 212
Proof of Circle Theorems 184	Finding the nth Term of a Quadratic 213
Probability Using Venn Diagrams 185	Inverse Functions 214
Cumulative Frequency 186	Composite Functions 215
Boxplots 187	Velocity-Time Graphs 216
Pythagoras in 3D 217	Pythagoras in 3D 217
Trigonometry in 3D 218	Trigonometry in 3D 218
Vectors 219	Vectors 219
Fractional Indices 188	
Recurring Decimals - Proof 189	
Rearranging Difficult Formulae 190	
Solving Quadratics with the Formula 191	
Factorising Hard Quadratics 192	
Algebraic Proof 193	
Exponential Functions 194	
Trigonometric Graphs 195	
Transformation of Functions 196	
Equation of a Circle 197	
Regions 198	
Direct and Inverse Proportion 199	
Similarity - Area and Volume 200	
The Sine Rule 201	
The Cosine Rule 202	
Area of a Triangle Using Sine 203	
And and Or Probability Questions 204	
Histograms 205	
Fractional Indices	Surds
$x^{\frac{a}{b}} = (\sqrt[b]{x})^a$	$\sqrt{a} \times \sqrt{b} = \sqrt{a \times b}$
$\sqrt{a \times b} = \sqrt{a} \times \sqrt{b}$	
Quadratic Formula	
$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	
Sine Rule	Histograms
$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$	frequency density
Cosine Rule	frequency
$a^2 = b^2 + c^2 - 2bc \cos A$	class width

MathsWatch - Revision lessons just a click away ...	
MATHSWATCH COVERS EVERY TOPIC ON THE 2015 SYLLABUS	
Grades that will be examined:	Grades that can be obtained:
Higher	Higher
Foundation	Foundation
1 2 3 4 5 6 7 8 9	4 5 6 7 8 9
1 2 3 4 5	1 2 3 4 5
The Maths Grade 1 to 9 syllabus is split into 5 areas and 240 videos.	
Number - 65 videos	
Algebra - 64 videos	
Ratio and Proportion - 17 videos	
Geometry and Measures - 66 videos	
Probability and Statistics - 28 videos	
How long will it take to revise?	
The timings of our videos are:	
0 to 5 mins 103 videos	
5 to 10 mins 110 videos	
10 to 15 mins 22 videos	
15 to 20 mins 4 videos	
20 to 25 mins 1 video	

Mr Barton GCSE Mathematics Takeaway

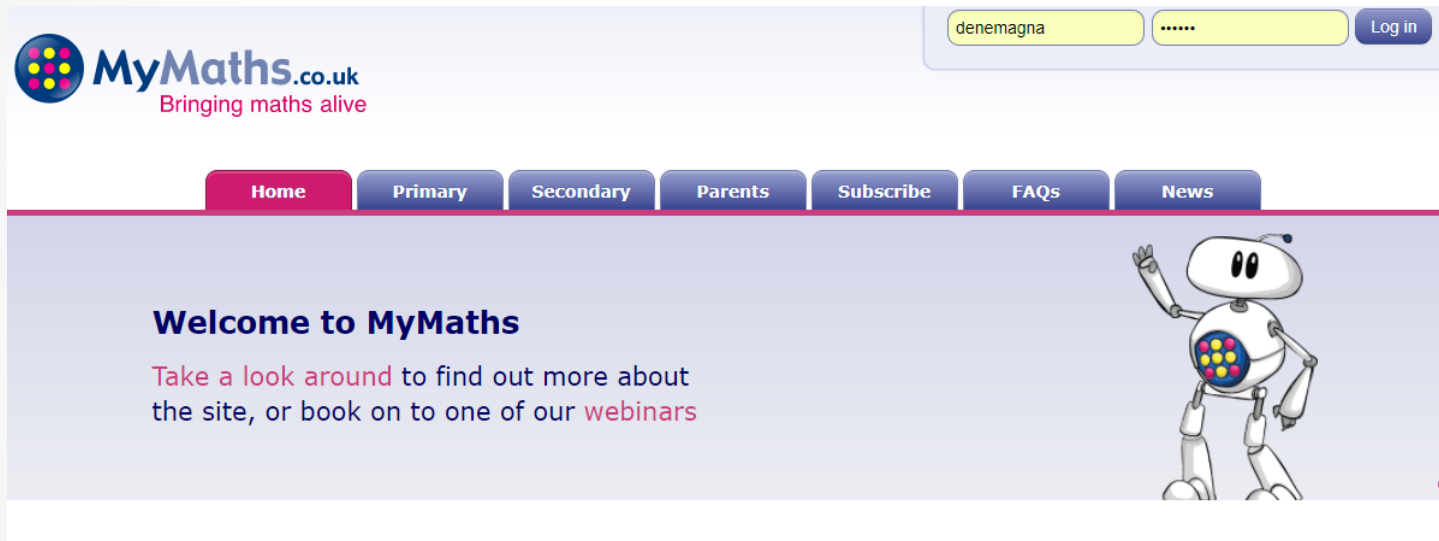
- A collection of GCSE questions and written answers by topic and by grade
- [Click here for Mr Barton Maths GCSE Takeaway Papers and Answers](#)

Grade C and above Topics				
<u>51. Percentages</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>52. Product of Prime Factors, HCF and LCM</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>53. Using Place Value</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>54. Negative Numbers</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>55. Estimation</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>56. Utility Bills</u>	<u>Video</u>	<u>Answers</u>	To Do	<u>Mathster Quiz</u>
<u>57. Collecting Like Terms</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>58. Expanding and Factorising</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>59. Solving Equations</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>60. Changing the Subject of a Formula</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>61. Inequalities</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>62. Trial and Improvement</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>63. Index Notation</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>
<u>64. Forming and Solving Equations</u>	<u>Video</u>	<u>Answers</u>	<u>DQ Quiz</u>	<u>Mathster Quiz</u>

www.mymaths.co.uk

- School Website

- School login denemagna
- School password volume

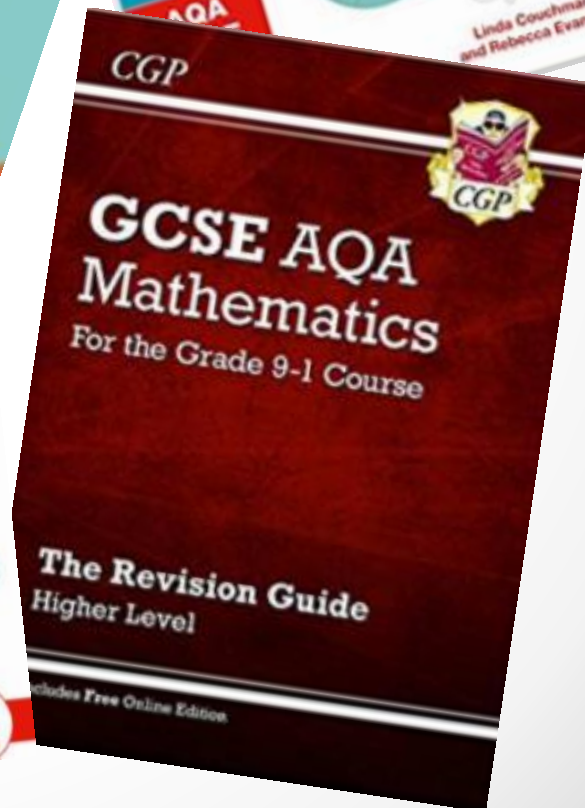
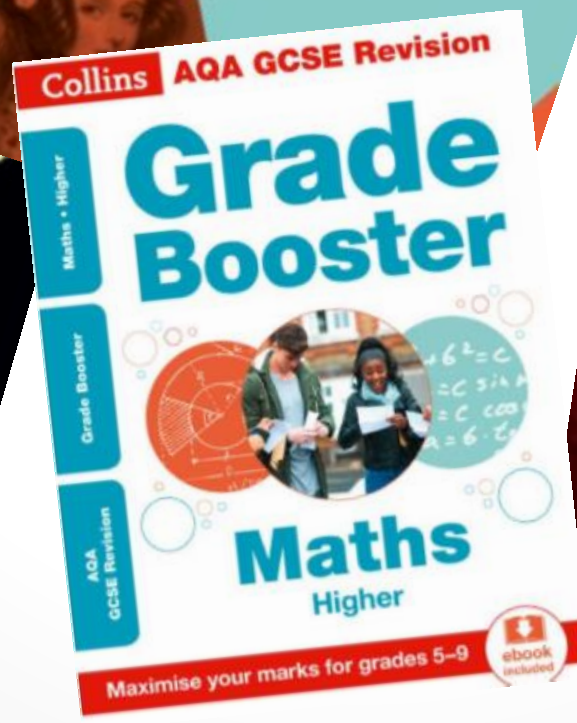
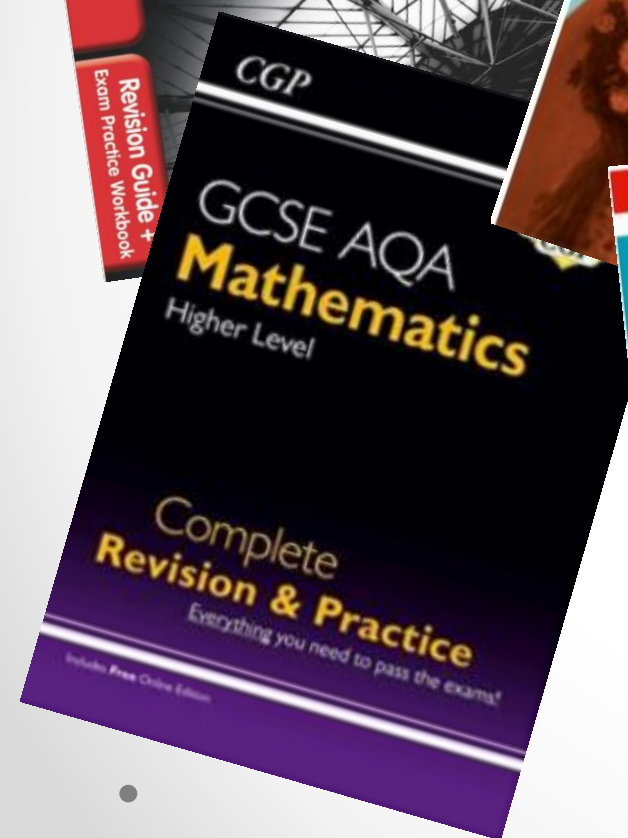
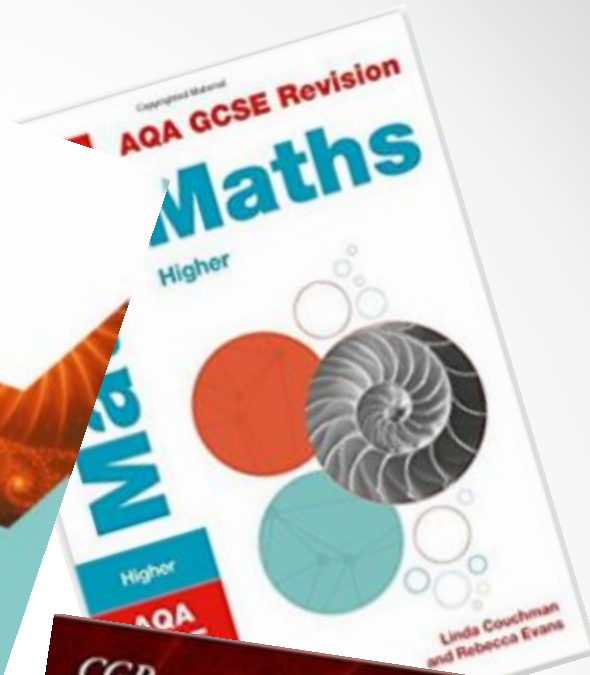
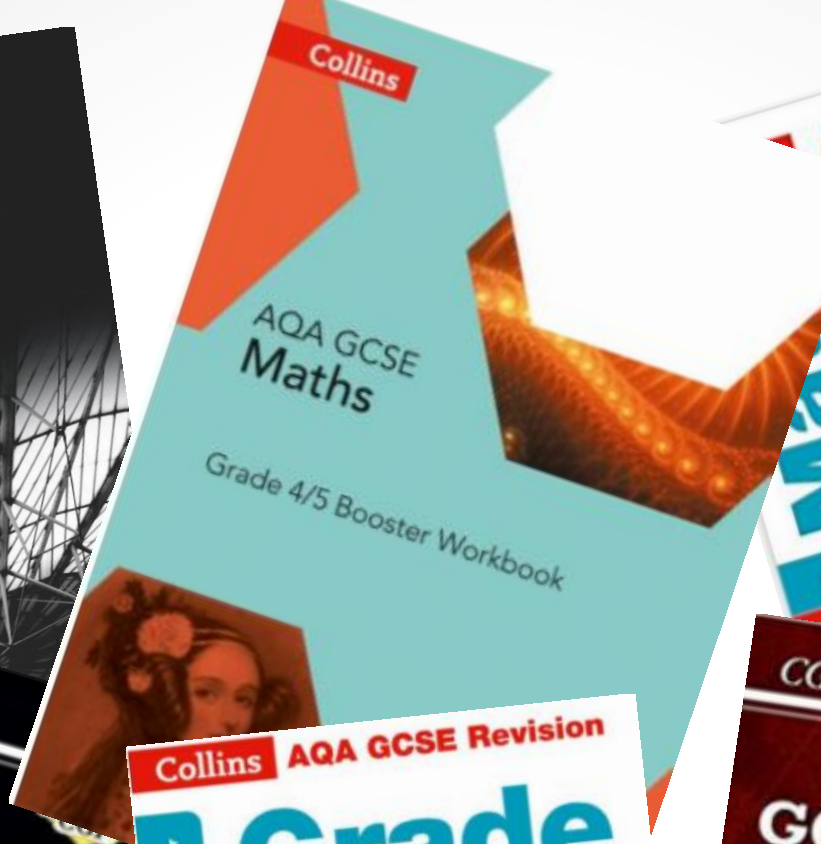
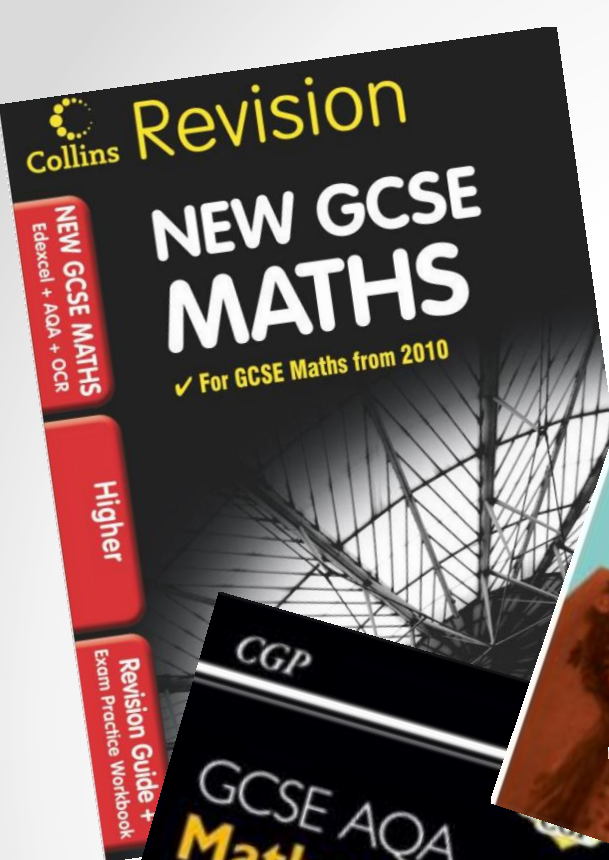


- Student portal

- Student login 3 numbers
- Student Password 3 letters

Maths ILT Support Time

- Every Monday and Wednesday tutor time
- With a member of staff
- In M7 maths classroom
- Bring the ILT you need help with
- Use Chromebooks for digital ILTs



Why study A level Mathematics at Dene Magna?

- **Career Opportunities**
- **Employability Skills**
- **Preparation for Higher Education**
- **Supporting Other Subjects**
- **An Interesting Course**

Revision Sessions After School

- Every Wednesday
- With your classroom teacher
- In the usual maths teaching room
- 3.30 pm until 4.30 pm
- Bring writing materials, a drink and a snack