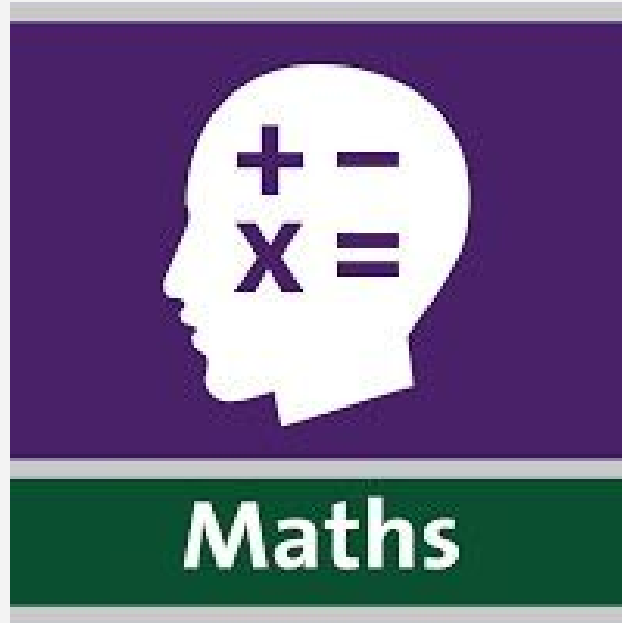


Making Maths Count

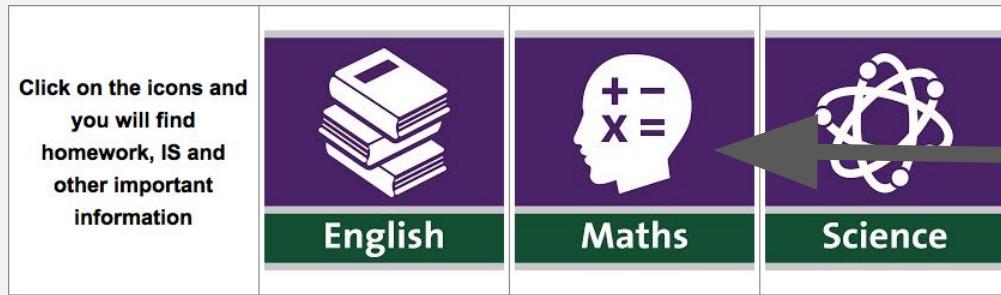


Accessing the school platform

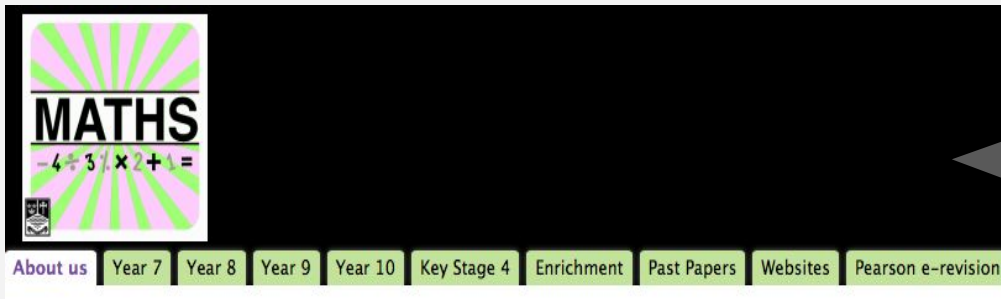
First thing you need to do is log into the schools website which will bring up various different menus.



Click on this box to get a new set of menus. And select Subject Clouds



Select Maths to take you to all the resources that have been uploaded



Once here there are two main areas for you peruse. Key stage 4 and Past Papers

Key Stage 4 area

In this area you will find revision presentations, practice booklets by topic and grade and a little Geordie bloke doing some revision topics.

Revision practice booklets

GCSE BOOKLETS BY SUBJECT AND GRADE

TITLE

- Grade B-A*
- Grade B-A* answers
- Grade C
- Grade C answers

Open GCSE BOOKLETS BY
SUBJECT AND GRADE

New GCSE Foundation by topic

TITLE

- Algebra
- Handling Data
- Number
- Shape

Open New GCSE Foundation
by topic

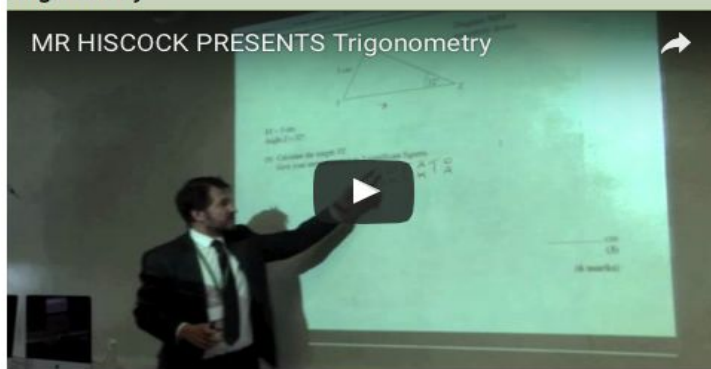
New Maths GCSE Higher by topic

TITLE

- Algebra
- Handling Data
- Number
- Shape and Space

Open New Maths GCSE
Higher by topic

Trigonometry



More videos will be added throughout the year.






Past Paper area


In this area you will find past papers from years gone by as well as the new specification sample papers that we have been given access to.






Edexcel Linear Papers (Old style GCSE) Specimen papers for new GCSE


Edexcel past papers	
TITLE	
	1MA0_1F_June_2012.pdf
	1MA0_1F_June_2013.pdf
	1MA0_1F_March_2013.pdf
	1MA0_1F_Nov_2012.pdf
	1MA0_1H_June_2012.pdf






 [Open Edexcel past papers](#)


OCR papers	
TITLE	
	OCR Foundation 1.pdf
	OCR Foundation 2.pdf
	OCR Foundation 3.pdf
	OCR Higher 1.pdf
	OCR Higher 2.pdf

 [Open OCR papers](#)

AQA papers	
TITLE	
	AQA Foundation 1.pdf
	AQA Foundation 2.PDF
	AQA Foundation 3.PDF
	AQA Higher 1.PDF
	AQA Higher 2.PDF

 [Open AQA papers](#)

Edexcel papers	
TITLE	
	Edexcel - Specimen 2 F Paper
	Edexcel - Specimen 2 F Paper
	Edexcel - Specimen 2 F Paper
	Edexcel - Specimen 2 H Paper
	Edexcel - Specimen 2 H Paper

 [Open Edexcel papers](#)

Remember that maths is a practice subject and the only way to improve it is to work through as many problems and papers as possible.

5-a-day

Videos

Worksheets

Practice Papers

Practice Questions

A-level 5-a-day

Revision Cards

This is an excellent website that has a wealth of resources to help your child improve their maths skills, these include how to videos and practice worksheets as well as the excellent 5 a day sheets for revision.

Method Maths (www.methodmaths.com)



MARK HISCOCK (TEACHER)



2 F H

Pupil view	%	Grade	All Pupils	HISCOCK, MARK (None)	All topics	Total
Spec 2017 1H	R ✓ ? %	100	?	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		100%
Spec 2017 2H	R ✓ ? %	100	?	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22		
Spec 2017 3H	R ✓ ? %	100	?	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18		
Spec Set1 1H	R ✓ ? %	0	?	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23		0%
Spec Set1 2H	R ✓ ? %	0	?	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24		
Spec Set1 3H	R ✓ ? %	0	?	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22		
June 2015 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24		50%
June 2015 2H	R ✓ ? %	0	U	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		B
Nov 2014 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		100%
Nov 2014 2H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23		A*
June 2014 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26		100%
June 2014 2H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27		A*
Nov 2013 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24		100%
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June 2013 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		100%
June 2013 2H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		A*
Mar 2013 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26		100%
Mar 2013 2H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		A*
Nov 2012 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		100%
Nov 2012 2H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		A*
June 2012 1H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26		100%
June 2012 2H	R ✓ ? %	100	A*	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26		A*

This is an excellent subscription only service which gives students to all of the Edexcel past papers online. Each question is marked instantly but more importantly the questions have prompts to help guide the students to the correct solutions.

Centre ID: marden

Username:
firstname.surname

Password: changeme

Just Maths (www.justmaths.co.uk)



JustMaths Online

The place for GCSE Maths: Tutorials, revision and support



Once you have logged in, you will find a whole of host of support including the "Super 60" for the first examination in Summer 2017 and "Resit 60" tutorials for those resitting the older GCSE.

If you are a student, you will be able to print out the worksheets to work on alongside watching the tutorials. You will also find the worksheet solutions.

This is an excellent subscription only service which focuses on 60 key topics. Each of the 60 topics has a video with an accompanying worksheet for students to work through.

Username:
MardenStudent

Password:
Marden



Before you start

Belief + Hard work + Support = Success

Some people dream of climbing Everest or swimming the channel - I just wanted to reassure myself that maths was not a mystery and, with your help, it no longer is!

Happy maths student

Let's start with **Belief**:
You need to believe that you **CAN DO** it! Learning maths is just like learning anything. You need to practise and always put in effort. When it gets difficult (and it will...) you need to remember that millions of people will have had

the same struggle you had, but they overcame it by **not giving up**.

This is a subscription only service which has online lessons and homeworks. The booster packs are very useful and the site has been redone for the new spec.

Student login:
Forename
Surname
Date of Birth
Students then set their own password.

Hegarty Maths (www.hegartymaths.co.uk)

Now for **Hard Work**:

Trying your best and always **putting in effort is crucial** to the process. You need to ensure you attempt all tasks and work hard at maths. Who knows? If you didn't enjoy it before, maybe this is your chance to change your views of it learn one of the most rewarding disciplines. And if you do enjoy it, then this is a fantastic opportunity to **master it**.

I was in the bottom set in maths in my school. I started doing lots of HegartyMaths and got better at maths. My teacher saw my progress in HegartyMaths and combined with my end of term assessment I was moved up two sets!

Happy Student @ Heston Community School

Hegarty Maths (www.hegartymaths.co.uk)

HegartyMaths is a amazing place to learn new things it shown me the best videos on how to work out the hardest questions

Happy Student @ Harris Academy Morden

We will **Support** you:
HegartyMaths is totally committed to helping students improve at maths. Whenever you are stuck we hope that we will be there to support you when you need it most.

Topics new to Foundation tier (previously Higher tier only)

Index laws: zero and negative powers (numeric and algebraic)

Standard form

Compound interest and reverse percentages

Direct and indirect proportion (numeric and algebraic)

Expand the product of two linear expressions

Factorise quadratic expressions in the form $x^2 + bx + c$

Solve linear/linear simultaneous equations

Solve quadratic equations by factorisation

Plot cubic and reciprocal graphs, recognise quadratic and cubic graphs

Trigonometric ratios in 2D right-angled triangles

Fractional scale enlargements in transformations

Lengths of arcs and areas of sectors of circles

Mensuration problems

Vectors (except geometric problems/proofs)

Density

Tree diagrams

Topics new to Higher tier

- Expand the products of more than two binomials
- Interpret the reverse process as the 'inverse function'; interpret the succession of two functions as a 'composite function' (using formal function notation)
- Deduce turning points by completing the square
- Calculate or estimate gradients of graphs and areas under graphs, and interpret results in real-life cases (not including calculus)
- Simple geometric progressions including surds, and other sequences
- Deduce expressions to calculate the n th term of quadratic sequences
- Calculate and interpret conditional probabilities through Venn diagrams

Topics new to both tiers

- Use inequality notation to specify simple error intervals
- Identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically
- Fibonacci type sequences, quadratic sequences, geometric progressions
- Relate ratios to linear functions
- Interpret the gradient of a straight line graph as a rate of change
- Know the exact values of $\sin \theta$ and $\cos \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90°
- Know the exact value of $\tan \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ$ and 60°

Formulae students need to learn.

Areas

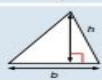
Rectangle = $l \times w$



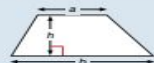
Parallelogram = $b \times h$



Triangle = $\frac{1}{2} b \times h$



Trapezium = $\frac{1}{2} (a + b)h$

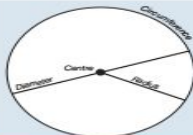


Circles

Circumference = $\pi \times \text{diameter}$, $C = \pi d$

Circumference = $2 \times \pi \times \text{radius}$, $C = 2\pi r$

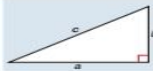
Area of a circle = $\pi \times \text{radius squared}$ $A = \pi r^2$



Pythagoras

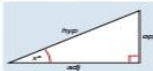
Pythagoras' Theorem

For a right-angled triangle,
 $a^2 + b^2 = c^2$



Trigonometric ratios (new to F)

$\sin x^\circ = \frac{\text{opp}}{\text{hyp}}$, $\cos x^\circ = \frac{\text{adj}}{\text{hyp}}$, $\tan x^\circ = \frac{\text{opp}}{\text{adj}}$



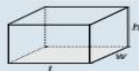
Quadratic equations

The Quadratic Equation

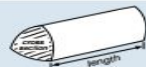
The solutions of $ax^2 + bx + c = 0$,
where $a \neq 0$, are given by $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Volumes

Cuboid = $l \times w \times h$



Prism = area of cross section
 $\times \text{length}$



Cylinder = $\pi r^2 h$



Volume of pyramid =
 $\frac{1}{3} \times \text{area of base} \times h$



Compound measures

Speed

speed = $\frac{\text{distance}}{\text{time}}$



Density

density = $\frac{\text{mass}}{\text{volume}}$



Pressure

pressure = $\frac{\text{force}}{\text{area}}$

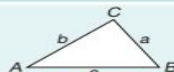


Trigonometric formulae

Sine Rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Cosine Rule $a^2 = b^2 + c^2 - 2bc \cos A$

Area of triangle = $\frac{1}{2} ab \sin C$



These formulae were previously given to the students but now they will have to learn them.