

# Maths Revision

Mrs C Davies



## ***Revising for maths is doing maths***

- Where to find suitable resources for GCSE Maths revision
- Understand expectations regarding exam preparation and revision

# What does effective maths revision look like?

Short answer; doing questions of appropriate challenge and checking the answers.

Past Papers and getting them marked

Working on corrections

Learning key formulae and terminology

Working on 'Problem Solving Style' Questions

Attending Revision Sessions

# Revision resources:

**Edexcel Exam Papers and Mark Schemes** – Working through exam papers allows the students to become familiar with the style of questions. It is also important students engage with the mark schemes as marking questions themselves helps them to see how the marks are allocated.

**Practice Papers and Mark Schemes**

**Exam Questions as Homework** – set at discretion of teacher

4 It would take 120 minutes to fill a swimming pool using water from 5 taps.

(a) How many minutes will it take to fill the pool if only 3 of the taps are used?

..... minutes  
(2)

(b) State one assumption you made in working out your answer to part (a).

.....  
.....  
(1)

**(Total for Question 4 is 3 marks)**

Question	Answer	Mark	Mark scheme
4 (a)	200	M1	for $120 \times 5 + 3$ oe
		A1	cao
(b)	statement	C1	Statement that each tap fills at the same rate or that the rate does not change over time Examples <b>Acceptable responses:</b> Taps are running at the same speed They (clearly referring to taps) all fill the pool with the same volume of water The amount of water is the same in the same time (again referring to taps) Each tap is doing a fifth of the filling That all taps take equal time to fill the pool All taps produce the same amount of water That the water flow stays at the same rate over the whole time.  <b>Non acceptable responses</b> It will take more time because there are less taps The less taps used the longer it takes to fill the pool That 1 tap can take up to 24 mins each 3 taps will take longer to fill the pool
Additional guidance			
Any statement referring to the same amount of water flowing from each tap is acceptable.			

# Revision resources:

Sparx Maths [www.sparxmaths.uk](http://www.sparxmaths.uk)

The screenshot shows the Sparx Maths website interface. At the top, a blue header bar contains a back arrow, the text 'Sparx Maths', and user information: '70 XP Cate Davies' with a bell icon and a menu icon. On the left, a sidebar has a star icon and the text 'Back to homework'. The main area is titled 'Independent Learning' and features two tabs: 'Find topics' (active) and 'My activity'. Below the tabs, there are three input fields: 'Search for topics:' with a text box 'Enter topic name or code', 'Your curriculum:' with a dropdown menu showing 'GCSE', and 'Default level:' with a dropdown menu showing 'Level 3'. Underneath, a section labeled 'Select a topic:' displays six blue buttons with icons: 'Number' (arithmetic symbols), 'Algebra' (x<sup>2</sup>), 'Ratio and Proportion' (3:2), 'Geometry' (triangle and height), 'Probability' (dice), and 'Statistics' (bar chart).

# Revision resources:

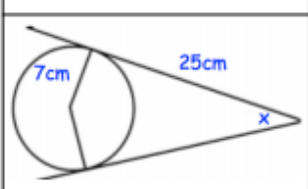
Corbett Maths – [www.corbettmaths.com](http://www.corbettmaths.com)

Videos, Exam Questions with Answers, Textbook exercises all broken down by topic

5 a day questions

Simplify $9\sqrt{35} \div 3\sqrt{5}$	
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**Higher**

	Shown is a circle, two tangents and two radii. Find the size of the angle marked x.
---	--

Expand $(x + 5)(x - 1)$	
----------------------------	--

**Foundation**

Work out $1\frac{3}{4} + 6\frac{2}{3}$	Corbettmaths
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# Revision resources:

Maths Genie - <http://mathsgenie.co.uk/>

Past paper banks  
with mark schemes  
model answers and  
videos explanations

Maths Genie

GCSE Revision

GCSE Papers ▼

A Level Revision

A Level Papers ▼

KS2 Revision

Resources

## Edexcel GCSE Exam Papers

Pearson Education accepts no responsibility whatsoever for the accuracy or method of working in the answers given.

Grade Boundaries

## Foundation GCSE Exam Papers

Paper	Answers
<a href="#">May 2022 Paper 1</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">June 2022 Paper 2</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">June 2022 Paper 3</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">November 2021 Paper 1</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">November 2021 Paper 2</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">November 2021 Paper 3</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>

## Higher GCSE Exam Papers

Paper	Answers
<a href="#">May 2022 Paper 1</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">June 2022 Paper 2</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">June 2022 Paper 3</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">November 2021 Paper 1</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">November 2021 Paper 2</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>
<a href="#">November 2021 Paper 3</a>	<a href="#">MS</a> <a href="#">Ans</a> <a href="#">▶</a>

# Revision resources:

Maths Genie - <http://mathsgenie.co.uk/>

Exam Questions with  
Answers all broken down by  
Grade

## Grade 8/9

Videos	Exam Questions	Exam Questions Booklet	Solutions
<a href="#"><u>Quadratic Simultaneous Equations</u></a>	<a href="#"><u>Exam Questions</u></a>	<a href="#"><u>Quadratic Simultaneous Equations</u></a>	<a href="#"><u>Solutions</u></a>
<a href="#"><u>Transforming Graphs <math>y=f(x)</math></u></a>		<a href="#"><u>Transforming Graphs <math>y=f(x)</math></u></a>	<a href="#"><u>Solutions</u></a>
<a href="#"><u>Proof</u></a>	<a href="#"><u>Exam Questions</u></a>	<a href="#"><u>Proof</u></a>	<a href="#"><u>Solutions</u></a>
<a href="#"><u>Completing the Square</u></a>	<a href="#"><u>Exam Questions</u></a>	<a href="#"><u>Completing the Square</u></a>	<a href="#"><u>Solutions</u></a>

# Revision resources:

drfrostmaths [www.drfron](http://www.drfron)



DOWNLOADABLE RESOURCE

[Full Coverage: Laws of Indices](#)

GCSE question compilation which aims to cover all types of questions that might be seen on the topic of laws of indices. Students can complete this set of questions interactively on the DFM Homework Platform. Also contains answers.

← Courses → Publishers → Edexcel

## GCSE Foundation a

**Number**

- 1a Factors, multiples, primes
- 1b Standard form
- 1c Error intervals and bounds

**Algebra**

- 2a L
- 2b S
- equa
- 2c L
- 2d Q
- 2e S
- 2f St

**Geometry and Measures**

**Pro**



## 206 Use laws of indices for multiplying powers, dividing powers and raising a power to a power. Deal with a power of 0.

Mastery: 0/100

Practise

OR NARROW DOWN

VIDEO DIFFICULTY

☐ E206: Exam Practice: Use laws of indices for multiplying powers, dividing powers and raising a power to a power. Deal with a power of 0.

[Example](#)



1-4

☐ K206a: Laws of indices for multiplying powers.

[Example](#)



1

☐ K206b: Laws of indices for dividing powers.

[Example](#)



1

☐ K206c: Laws of indices for raising a power to a power.

[Example](#)



1

☐ K206d: Laws of indices for multiplying powers, dividing powers and raising a power to a power.

[Example](#)



2

## Revision

[Select all Key Skills](#)

[Select all Exam Practice](#)

# Revision resources:

Following the mock exams we will creating individual QLA's

Mathematics Assessment Feedback  
Paper March Mock Paper H1

Qs	Question Topic	Score	Clip Number
1	Share using a ratio	2 / 2	
2	Age problem	0 / 4	
3	Volume / surface area of cube	4 / 4	
4	Estimate for speed/dist/time	3 / 4	
5	Money word problem	4 / 4	
6	Tree diagram	4 / 4	
7	Cubic graph	0 / 1	
8	Applying area of a circle	2 / 3	
9	Solve inequality / quadratic	1 / 5	
10	Box plots	4 / 5	
11	1-D similarity	4 / 4	
12	Enlargement	0 / 2	
13	2-D / 3-D enlargement	1 / 4	
14	Inverse proportion	0 / 3	
15	Ratio problem	0 / 3	
16	L-shape area with algebra	1 / 5	
17	Pythagoras with algebra	0 / 3	
18	Surds	0 / 5	
19	Probability / algebra	0 / 2	
20	Functions	0 / 5	
21	Exponentials	0 / 4	
22	Proof - circles / angles	0 / 4	
Total		30 / 80	

Mathematics Assessment Feedback  
Paper March Mock Paper H2

Qs	Question Topic	Score	Clip Number
1	Use your calculator	3 / 3	
2	Convert metric area	0 / 2	
3	LCM problem	3 / 3	
4	Pressure formula (given)	2 / 3	
5	Use quadratic graph	1 / 3	
6	Compound interest	3 / 5	
7	Angles and algebra	5 / 5	
8	Estimate of mean	3 / 3	
9	Scale factor problem	2 / 3	
10	Cumulative frequency	1 / 6	
11	Nested trigonometry	4 / 4	
12	Inequalities / regions	0 / 4	
13	Circle theorems	0 / 3	
14	Simplify fraction / quadratics	0 / 3	
15	Ratio problems	0 / 5	
16	Volume / surface area of cone	2 / 4	
17	Probability	2 / 4	
18	Functions	1 / 3	
19	Bounds, suitable accuracy	3 / 4	
20	Vectors	1 / 5	
21	Circle graph problem	0 / 5	
Total		36 / 80	

For every exam paper completed by the students there will be a QLA highlighting their strengths and weaknesses.

# Further resources available:

- Your Maths teacher
- Revision guides and workbooks
- Revision sessions (look out for them and attend!)
  - Monday Lunchtimes (Higher)
  - Monday Afterschool (Foundation)
- Friday morning support sessions – targeted invites

Higher  
Tier

9  
8  
7  
6  
5  
4  
3  
2  
1

# Structure of the Maths GCSE

- Students sit 3 papers (each 1.5 hours long)

Foundation  
Tier

## Maths GCSE Grade Boundaries 2025

Exam					Grade								
Board	Month	Year	Tier	Total	9	8	7	6	5	4	3	2	1
Edexcel	June	2025	F	240					175 73%	144 60%	105 44%	67 28%	29 12%
Edexcel	June	2025	H	240	217 90%	186 78%	156 65%	121 50%	87 36%	53 22%	36 15%		

## **Pen, Pencil, Ruler**

## **Calculator**

All students must have a scientific Calculator. They should get one as soon as possible if they do not.

Need to be familiar with their calculators before the exam so they know how different functions like sin, cos, tan, square root work on their calculators

## **Compasses and Protractor.**

Check the compasses work and don't slip.

# Formulae Sheet

## Higher Tier Formulae Sheet

### Perimeter, area and volume

Where  $a$  and  $b$  are the lengths of the parallel sides and  $h$  is their perpendicular separation:

$$\text{Area of a trapezium} = \frac{1}{2} (a + b) h$$

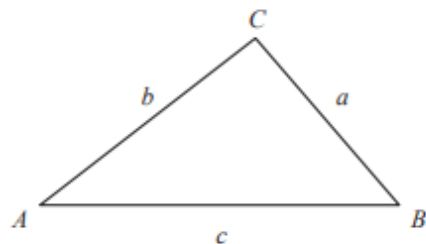
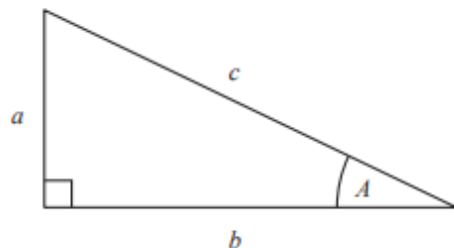
Volume of a prism = area of cross section  $\times$  length

Where  $r$  is the radius and  $d$  is the diameter:

$$\text{Circumference of a circle} = 2\pi r = \pi d$$

$$\text{Area of a circle} = \pi r^2$$

### Pythagoras' Theorem and Trigonometry



### Compound Interest

Where  $P$  is the principal amount,  $r$  is the interest rate over a given period and  $n$  is number of times that the interest is compounded:

$$\text{Total accrued} = P \left( 1 + \frac{r}{100} \right)^n$$

### Quadratic formulae

The s  
where

$x$

In any  
the le

$a^2$

In any  
 $a$ ,  $b$  a  
 $c$  is th

si

In any  
are th

si

cc

A

### Prob

Where  
and P

## Foundation Tier Formulae Sheet

### Perimeter, area and volume

Where  $a$  and  $b$  are the lengths of the parallel sides and  $h$  is their perpendicular separation:

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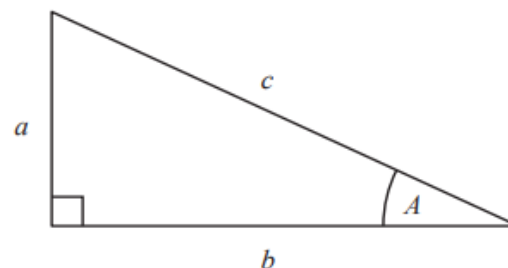
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### Pythagoras' Theorem and Trigonometry



In any right-angled triangle where  $a$ ,  $b$  and  $c$  are the length of the sides and  $c$  is the hypotenuse:

$$a^2 + b^2 = c^2$$

In any right-angled triangle  $ABC$  where  $a$ ,  $b$  and  $c$  are the length of the sides and  $c$  is the hypotenuse:

$$\sin A = \frac{a}{c} \quad \cos A = \frac{b}{c} \quad \tan A = \frac{a}{b}$$

### Compound Interest

Where  $P$  is the principal amount,  $r$  is the interest rate over a given period and  $n$  is number of times that the interest is compounded:

$$\text{Total accrued} = P \left( 1 + \frac{r}{100} \right)^n$$

### Probability

Where  $P(A)$  is the probability of outcome  $A$  and  $P(B)$  is the probability of outcome  $B$ :

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

### END OF EXAM AID

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

$$P(A \text{ and } B) = P(A \text{ given } B) P(B)$$



# Success in Maths = Practice, Assess, Practice, Assess

If you have any further queries, please email

Head of Maths: [c.davies@roundwoodpark.co.uk](mailto:c.davies@roundwoodpark.co.uk)

KS4 Coordinator: [m.aitken@roundwoodpark.co.uk](mailto:m.aitken@roundwoodpark.co.uk)

# Where next...

HOUSE	SESSION 1 (7:30pm)	SESSION 2 (7:45pm)	SESSION 3 (8pm)
Cadbury, Frank and GT	English (Mrs Jackson) Main hall	Science (Mr Connor) Canteen	Maths (Mrs Davies) Sixth form common room
Mandela and Owens	Science (Mr Connor) Canteen	Maths (Mrs Davies) Sixth form common room	English (Mrs Jackson) Main hall
Scott and Wilberforce	Maths (Mrs Davies) Sixth form common room	English (Mrs Jackson) Main hall	Science (Mr Connor) Canteen

