

Supporting your child in Mathematics

Y11 2026

What is $5 \div (((5 \div 5) \div (5 \div 5)) \div 5)$?

A $\frac{1}{25}$

B $\frac{1}{5}$

C 1

D 5

E 25



**Jesmond Park
Academy**

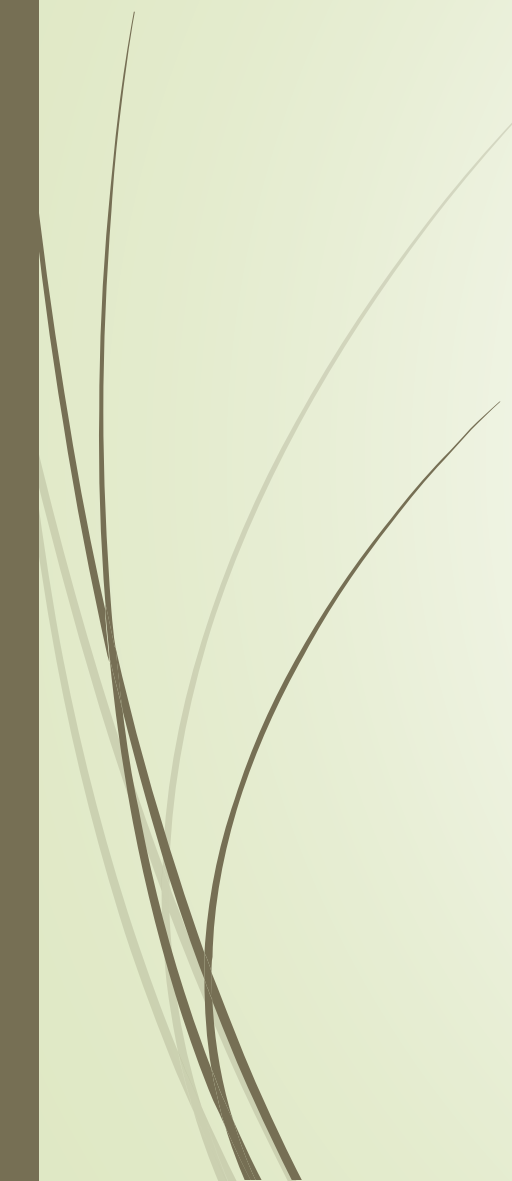


Mathematics in KS4

- About us and the curriculum at Key Stage 4
- Higher/Foundation and GCSE Grades
- Assessments
- Homework
- Supporting at Home
- Useful Resources

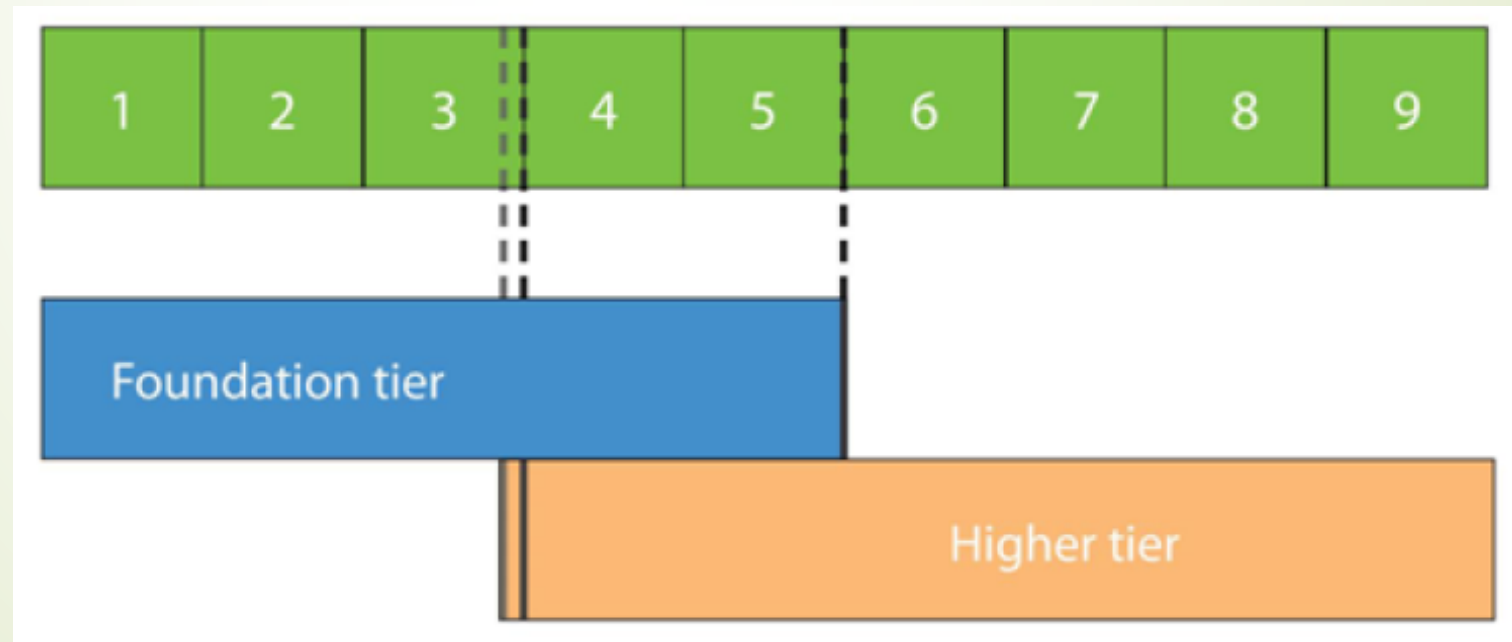


About us

- One the most successful maths departments in the North East.
 - 33% of pupils achieved a grade 7 or above in 2025/26
 - (national figure is ~22%)
 - 80% of pupils achieved a grade 4 or above in 2025/26
 - (national figure is ~72%)
 - 15 experienced maths specialist teachers
 - High retention of pupils going on to study A-level maths
- 

GCSE Tiers of Entry

- We aim to enter pupils for the tier of entry that gives them the best chance of their highest possible grade
- Entries are not made until after January Mocks in Year 11. Assessments are carried out in throughout Year 11 to ensure pupils are covering the most appropriate work to support their attainment in the final GCSE exams – set changes are made if needed





Assessments and mocks

- In year 11 we move to an assessment structure that supports the revision process.
 - In year 11 there are 4 full GCSE assessments, one in November, two during the January Mocks, and one in March
- 

Final Exam Structure

Paper 1

Fri, 14 May 2027

231 days

16 hours

Paper 2

Thu, 27 May 2027

244 days

16 hours

Paper 3

Mon, 14 June 2027

262 days

16 hours

- We enter pupils for the OCR GCSE Mathematics Exam (code J560).
- Examination is across three 90minute papers:

Foundation tier (grades 5 to 1)

Paper	Marks	Duration	Weighting
Paper 01 - J560/01 (Calculator permitted)	100	1 hour 30 mins	33⅓%
Paper 02 - J560/02 (Calculator not permitted)	100	1 hour 30 mins	33⅓%
Paper 03 - J560/03 (Calculator permitted)	100	1 hour 30 mins	33⅓%

Higher tier (grades 9 to 4)

Paper	Marks	Duration	Weighting
Paper 04 - J560/04 (Calculator permitted)	100	1 hour 30 mins	33⅓%
Paper 05 - J560/05 (Calculator not permitted)	100	1 hour 30 mins	33⅓%
Paper 06 - J560/06 (Calculator permitted)	100	1 hour 30 mins	33⅓%



AQA Further Maths

- Only pupils who achieve a grade 8 or 9 in January mocks in year 11 will be entered for this extra exam
- It will be an opt-in process, with the majority of the teaching taking place in Period 7 sessions.
- Some of the “overlap topics” will be taught in mainstream lessons to pupils covering the Higher syllabus.
- Helps bridge the gap to A-level but is not essential.

Year 11 Complete the course by February

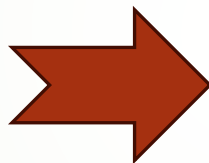
Date	Week	Stage 4	Stage 5	Stage 6	Stage 7
07/09/2026	1	Standard form	Multiplying and dividing with standard form	Standard form in context	Rationalising
14/09/2026	2	Geometric sequences	Rotation	Vector calculations	Consecutive transformations
21/09/2026	3	Area of a circle	Inequalities	Solving linear equations involving fractions	Completing the square
28/09/2026	4	Mean missing values and combining	Mean and mode from a grouped frequency table	Dependent events	Sine rule for area
05/10/2026	5	Product of Prime Factors	Adding and subtracting with standard form	Adding and subtracting surds	Graph sketching
12/10/2026	6	Pythagoras	Drawing curved graphs	Changing the subject involving factorisation (this is on foundation too)	More circle theorems
19/10/2026	7	Adding and subtracting with negative numbers	Reverse percentages and interest	Answers in terms of pi	Numerical methods
02/11/2026	8	Writing expressions/formulae	Finding sides using trigonometry	Adding and subtracting algebraic fractions	Sine rule
09/11/2026	9	Collecting data and sampling	Solving simultaneous equations algebraically	Comparing sets of data	Inverse and composite functions
16/11/2026	10	Laws of indices	Relative frequency	Volume and surface area of solids	harder ratio questions
23/11/2026	11	Angles in polygons	Numerical Negative (and fractional higher) indices	Time graphs	Quadratic simultaneous equations
30/11/2026	12	Factorising single bracket with powers	Factorising and solve quadratics with a=1	Bearings	Cosine rule
07/12/2026	13	Scatter graphs	Tree diagrams	Simplifying algebraic negative and fractional indices	Equation of circles and tangents
14/12/2026	14	Reflections	Changing the subject of a formula	Graphical simultaneous equations	Solve quadratic inequalities
04/01/2027	15	Adding and subtracting with mixed numbers	Compound Measures	Combining ratios	Transforming graphs
11/01/2027	16	Mock exams	Mock exams	Mock exams	Mock exams
18/01/2027	17	Mock exams	Mock exams	Mock exams	Mock exams
25/01/2027	18	Plans and elevations	Volume and surface area of cylinders	Exact trig values	Vector geometry
01/02/2027	19	Combining single brackets	Error Bounds	Maximum and minimum calculations	Estimating gradients
08/02/2027	20	Estimation	Ratio more than problems	Geometric proof	Area under a curve
22/02/2027	21	Revision	Revision	Revision	Revision
01/03/2027	22	Revision	Revision	Revision	Revision
08/03/2027	23	Revision	Revision	Revision	Revision
15/03/2027	24	Revision	Revision	Revision	Revision
22/03/2027	25	Revision	Revision	Revision	Revision
12/04/2027	26	Revision	Revision	Revision	Revision
19/04/2027	27	Revision	Revision	Revision	Revision
26/04/2027	28	Revision	Revision	Revision	Revision
03/05/2027	29	Revision	Revision	Revision	Revision
10/05/2027	30	Exam P1 Thurs 14th AM	Exam P1 Thurs 14th AM	Exam P1 Thurs 14th AM	Exam P1 Thurs 14th AM
17/05/2027	31	Exams	Exams	Exams	Exams
24/05/2027	32	Exams P2 Wed 3rd AM	Exams P2 Wed 3rd AM	Exams P2 Wed 3rd AM	Exams P2 Wed 3rd AM
07/06/2027	33	Exams P3 Wed 10th AM / FM P1 Mon 8th PM	Exams P3 Wed 10th AM / FM P1 Mon 8th PM	Exams P3 Wed 10th AM / FM P1 Mon 8th PM	Exams P3 Wed 10th AM / FM P1 Mon 8th PM
14/06/2027	34	Exams FM P2 Mon 15th AM	Exams FM P2 Mon 15th AM	Exams FM P2 Mon 15th AM	Exams FM P2 Mon 15th AM

Back of the Homework Booklet

 **Jesmond Park Academy**

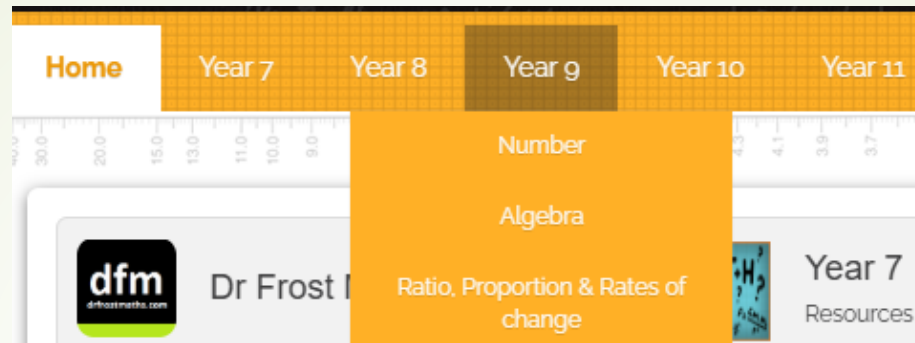
Maths Department
Year 11 Stage 7 Booklet 1

NAME: _____
MATHS TEACHER: _____
MATHS CLASS CODE: _____
FORM: _____

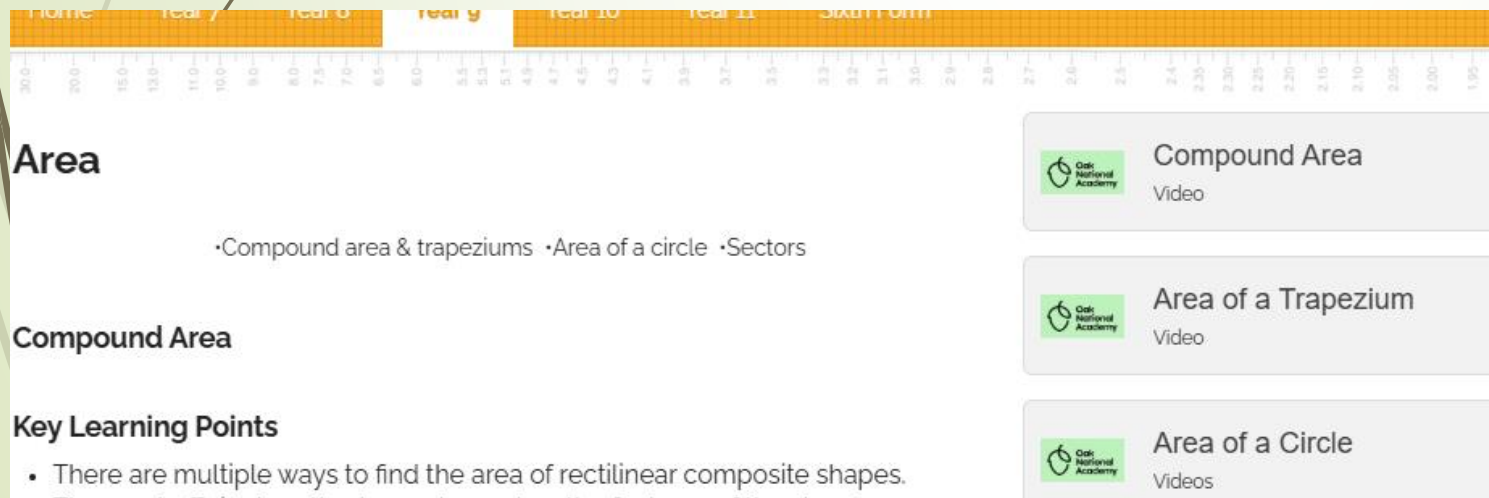



Date	Week	Topic
07/09/2026	1	Multiplying and dividing
14/09/2026	2	Rotation
21/09/2026	3	Inequalities
28/09/2026	4	Mean and mode from a graph
05/10/2026	5	Adding and subtracting
12/10/2026	6	Drawing curves
19/10/2026	7	Reverse percentages
02/11/2026	8	Finding sides using trigonometry
09/11/2026	9	Solving simultaneous equations
16/11/2026	10	Relative frequency
23/11/2026	11	Numerical Negative numbers
30/11/2026	12	Factorising and solving quadratic equations
07/12/2026	13	Tree diagrams
14/12/2026	14	Changing the subject of a formula
04/01/2027	15	Compound interest
11/01/2027	16	Mock examination
18/01/2027	17	Mock examination

VLE – links to full lessons from Oak Academy

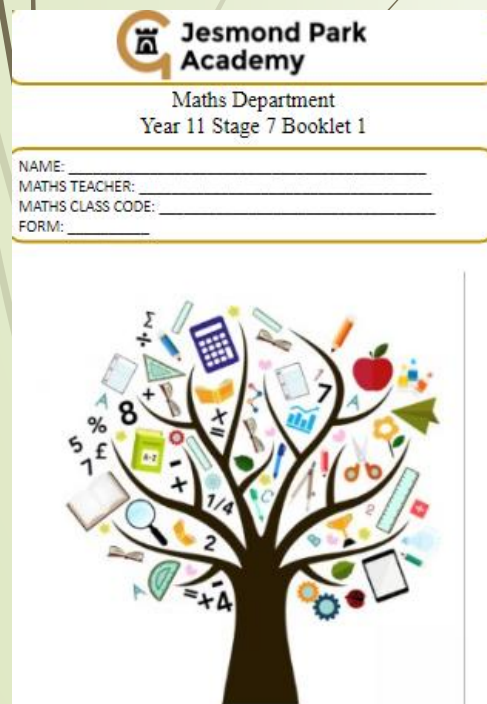


Our VLE now contains links to complete lessons, taught by qualified maths teachers



Homework (and form time) – At Year 11

- All pupils have a booklet that is used for homework and during registration
- They complete a supported revision programme during registration on Tuesday and Thursday
- There are “Exam Practice” homework questions in the year 11 booklet to ensure breadth of coverage in the build up to the final exams – “little and often!”



Jesmond Park Academy

Skills revision

1 Steven pours 17 litres of liquid into containers each holding 900 ml correct to the nearest 100 ml. How many containers does he need?

2 Simplify $\frac{2 - \sqrt{3}}{\sqrt{3}}$

3 Solve $\frac{x}{6} = 2$

4 Solve $\frac{1}{x+2}$

5 Factorise $x^2 - 4$

Last week's work.

Rationalise the denominators for each of the following

Last week's registration topic

1. The height of a tree increases by 60% each year. When planted the tree was 40cm tall. How tall will the tree be in 5 years time?

2. The population of a country is increasing by 5% a year. How many years will it take the population of the country to double?

This week I have revised

Academy

Exam practice 1

A grain of salt weighs 6.48×10^{-4} kg on average. A packet contains 0.35 kg of salt. Use this information to calculate the number of grains of salt in the packet.

Exam practice 3

The diagram shows all the paths in a park. ABCD is a square of side 40 metres. E is the midpoint of AB. F is the midpoint of CD. The circular path is in the centre of the square and has radius 5 metres.

Write 504 as the product of its prime factors.

Work out the percentage of the square ABCD that is shaded.

Not to scale

Support at home

- Make homework as purposeful as possible

The screenshot shows a Google search interface. The top search bar contains the text "gcse rationalising the denominator". Below it, there are tabs for "All", "Videos", "Images", "News", "Books", "Maps", "Web", and "More". A "Memory usage: 159 MB" indicator is visible. Below the tabs are buttons for "Worksheets", "Calculator", "Examples", "Pdf", and "Questions". A second search bar contains the text "gcse rules of indices". Below the search bar, there are search results. The first result is from BBC, titled "Rationalising the denominator". The second result is from MME Revise, titled "Indices Rules Worksheets | Questions and Revision". The third result is from YouTube, titled "Laws of Indices - Part 1 (Higher & Foundation) | GCSE Maths Tutor".

Google
gcse rationalising the denominator

All Videos Images News Books Maps Web More

Memory usage: 159 MB

Worksheets Calculator Examples Pdf Questions

Google
gcse rules of indices

BBC
https://www.bbc.com/news/education-12345678
Rationalising the denominator

If the denominator is a square root, then you can rationalise it by multiplying the numerator and denominator by the same square root.

MME Revise
https://mmerevise.co.uk › GCSE Maths Revision
Indices Rules Worksheets | Questions and Revision

Rules of Indices worksheets, questions and revision for GCSE Maths. All the revision in one place.

YouTube · The GCSE Maths Tutor
186.3K+ views · 4 years ago
Laws of Indices - Part 1 (Higher & Foundation) | GCSE Maths Tutor

GCSE MATHS TUTOR
A video revising the techniques and strategies surrounding indices (Part 1) This video is part of the Number module in

The image shows handwritten notes on a piece of paper. At the top, it says "What I have revised this week-". Below this, there are several rules of indices written in blue and red ink. The rules include: $y^a \times y^b = y^{a+b}$, $w^3 \times w^5 = w^8$, $y^a \div y^b = y^{a-b}$, $w^8 \div w^2 = w^6$, $a^{-2} \times a^5 = a^3$, $a^4 \div a^6 = a^{-2}$, $y^2 \times y^3 = y^5$, $y \times y \times y \times y \times y = y^5$, $\frac{y^5}{y^3} = y^2$, $\frac{y \times y \times y \times y \times y}{y \times y \times y} = y^2$, $\frac{24w^6}{2w^4} = 12w^2$, $(y^a)^b = y^{ab}$, $(y^4)^5 = y^{20}$, and $(y^3)^2 = y^6$.

What I have revised this week-

Indices 17

$y^a \times y^b = y^{a+b}$ $w^3 \times w^5 = w^8$ $y^a \div y^b = y^{a-b}$ $w^8 \div w^2 = w^6$

$a^{-2} \times a^5 = a^3$ $a^4 \div a^6 = a^{-2}$

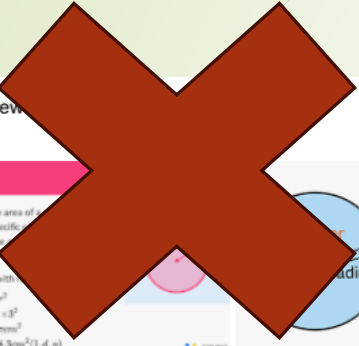
$y^2 \times y^3 = y^5$ $y \times y \times y \times y \times y = y^5$ $\frac{y^5}{y^3} = y^2$ $\frac{y \times y \times y \times y \times y}{y \times y \times y} = y^2$ $\frac{24w^6}{2w^4} = 12w^2$

$(y^a)^b = y^{ab}$ $(y^4)^5 = y^{20}$

$(y^3)^2 = y^6$

Support at home

- Skip the AI Overview, use the links



AI Overview

Area of a circle

Area of circle is given by the area of πr^2 , which is made by using a specific formula between the radius of a circle.

E.g. What is the area of a circle with radius 3cm?

$$\text{Area} = \pi r^2$$
$$= \pi \times 3^2$$
$$= 9\pi \text{ cm}^2$$
$$= 28.3 \text{ cm}^2 \text{ (1.d.p.)}$$

$$A = \pi r^2$$
$$d = 12$$
$$r = 12 \div 2$$
$$\text{radius} = 6 \text{ m}$$

Area and Circumference

The area of a circle is the amount of space it takes up. The circumference of a circle is the distance around it.

What are the formulas for area and circumference?

Area: $A = \pi r^2$

Circumference: $C = 2\pi r$

The area of a circle is calculated using the formula **Area = πr^2** , where π is pi (approx. 3.14159) and **r** is the **radius** (the distance from the center to the edge).  YouTube · 1st Class Mat... +1

You can review a full breakdown of the topic through the [Third Space Learning GCSE Guide](#). 

Key Steps to Find the Area

1. **Identify the radius (r):** If the question gives you the **diameter** (the full width across



Useful resources

- A calculator! (Casio FX-83, FX-85, FX-991)
- Calculator familiarity is key at GCSE

Results

Check each product page for other buying options.

Sponsored

OSALO
Scientific Calculator 417 Function 2 Line 10+2 Digits Written Display Solar and Battery Calculators for Students Secondary School College Black (OS 991ES Plus 2nd Edition)
★★★★☆ (933)
1K+ bought in past month
£22.99
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Scientific Calculator with Sliding Cover
★★★★☆
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16 of 189 results for "casio calculator"

✓

fx-83GTCW+ Scientific Calculator
4.8 ★★★★★ (136)
20K+ bought in past month
£14.82 RRP: £16.99
FREE delivery Tue 29 Sept
Only 9 left in stock.
Add to basket
More buying choices
£14.46 (11 new offers)
+2

Casio
fx-85GTCW+ Scientific Calculator
4.7 ★★★★★ (4.7K)
10K+ bought in past month
£15.95
FREE delivery Tue 29 Sept

Sponsored
Casio
fx-991CW+ Scientific Calculator
4.6 ★★★★★ (94)
8K+ bought in past month
£29.00 RRP: £35.99
FREE delivery 5 - 13 Oct on your order to UK or Ireland

Only get "991" if likely to do A-level:

Useful resources – list on next page (this will be sent out)

- To support your child at home we encourage the use of Corbett Maths, Maths Genie and GCSE Bitesize
- Free websites with video guides and practice worksheets

Corbettmaths – Videos, worksheets, 5-a-day and much more

<https://corbettmaths.com> ▼

Welcome to **Corbettmaths**! Home to 1000's of maths resources: Videos, Worksheets, Revision Cards and much more.

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The Corbettmaths Practice Papers



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Welcome

5-a-day

Videos

Worksheets

Practice Papers



Useful Maths Revision Websites

<https://www.drfrust.org/revision/papers>

*register for a free account to record progress

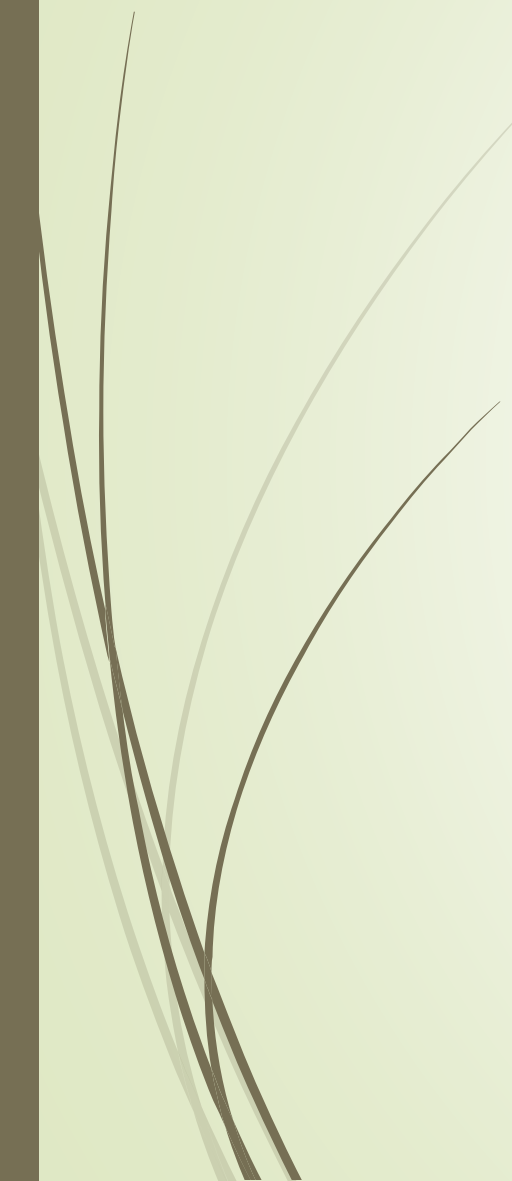
www.onmaths.com/our-top-top-topics

www.1stclassmaths.com

www.mathslinks.co.uk/gcse-questions-by-topic

www.gcsemathsquestions.co.uk

www.mathsgenie.co.uk





**“The only way to learn mathematics is
to do mathematics.”**

Paul R. Halmos

Thank you

What is $5 \div (((5 \div 5) \div (5 \div 5)) \div 5)$?

A $\frac{1}{25}$

B $\frac{1}{5}$

C 1

D 5

E 25

We have

$$(5 \div 5) \div (5 \div 5) = 1 \div 1 = 1.$$

Therefore

$$((5 \div 5) \div (5 \div 5)) \div 5 = 1 \div 5 = \frac{1}{5}.$$

Hence

$$5 \div (((5 \div 5) \div (5 \div 5)) \div 5) = 5 \div \frac{1}{5} = 5 \times \frac{5}{1} = 25.$$