

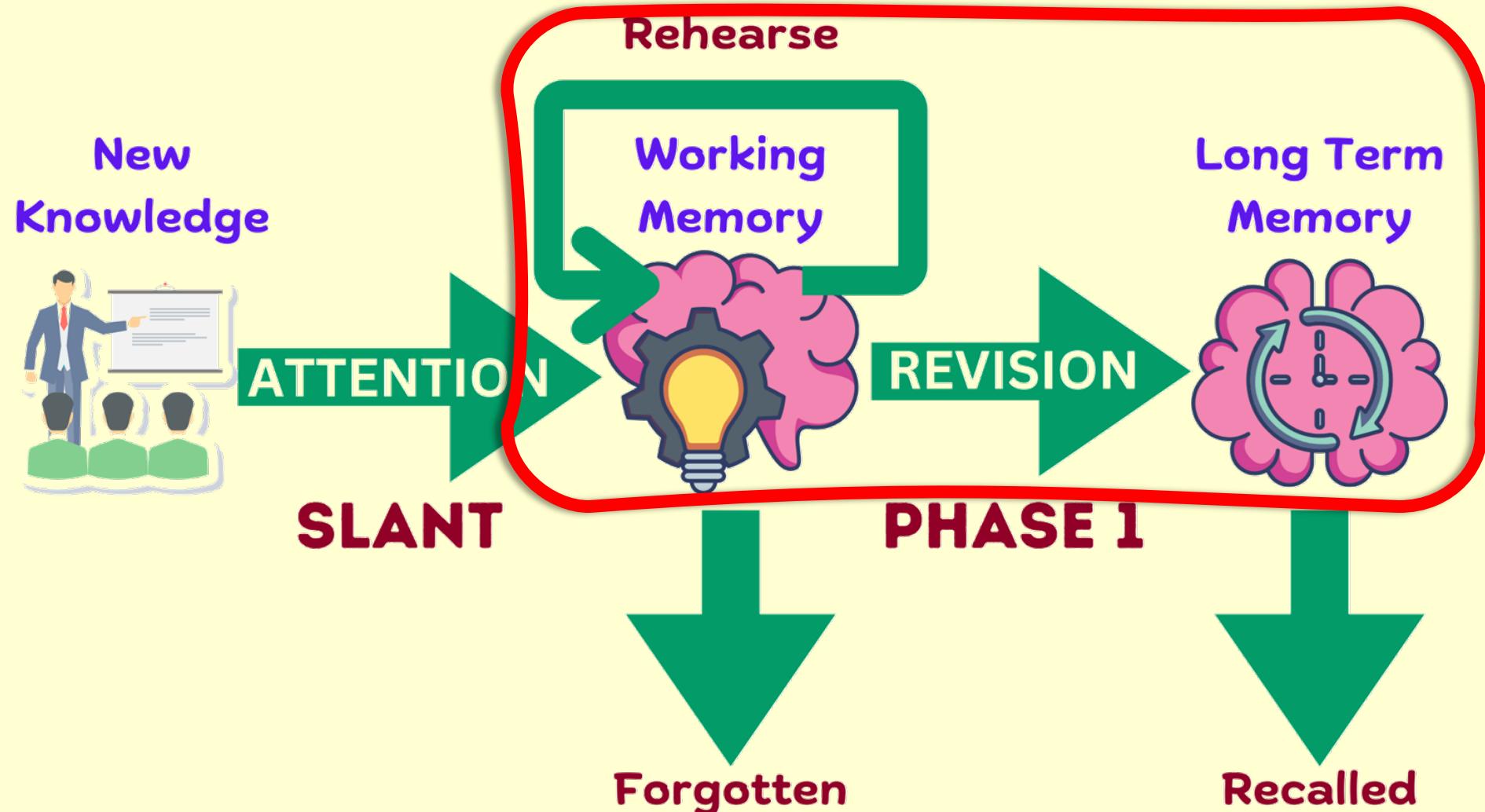
# Revision in Maths

<p>Calculate the value of each letter</p>	<p>Find the area of the triangle</p>	<p>Find the volume of the prism</p>	<p>Find the missing length, x</p>
<p>Find the volume of the prism</p>	<p>Find the angles <math>a</math> and <math>b</math></p>	<p>Find the lengths <math>m</math> and <math>n</math></p>	<p>Explain how you can work out the interior angle of an <math>n</math>-sided regular polygon.</p> <p>Can you come up with a formula?</p>
<p>Calculate the bearing of the harbour from the lighthouse to the nearest degree.</p>	<p>Find the area of Pacman</p>	<p>Work out the surface area of the cylinder</p>	<p>Describe fully the single transformation which maps A to B</p>

# Memory model

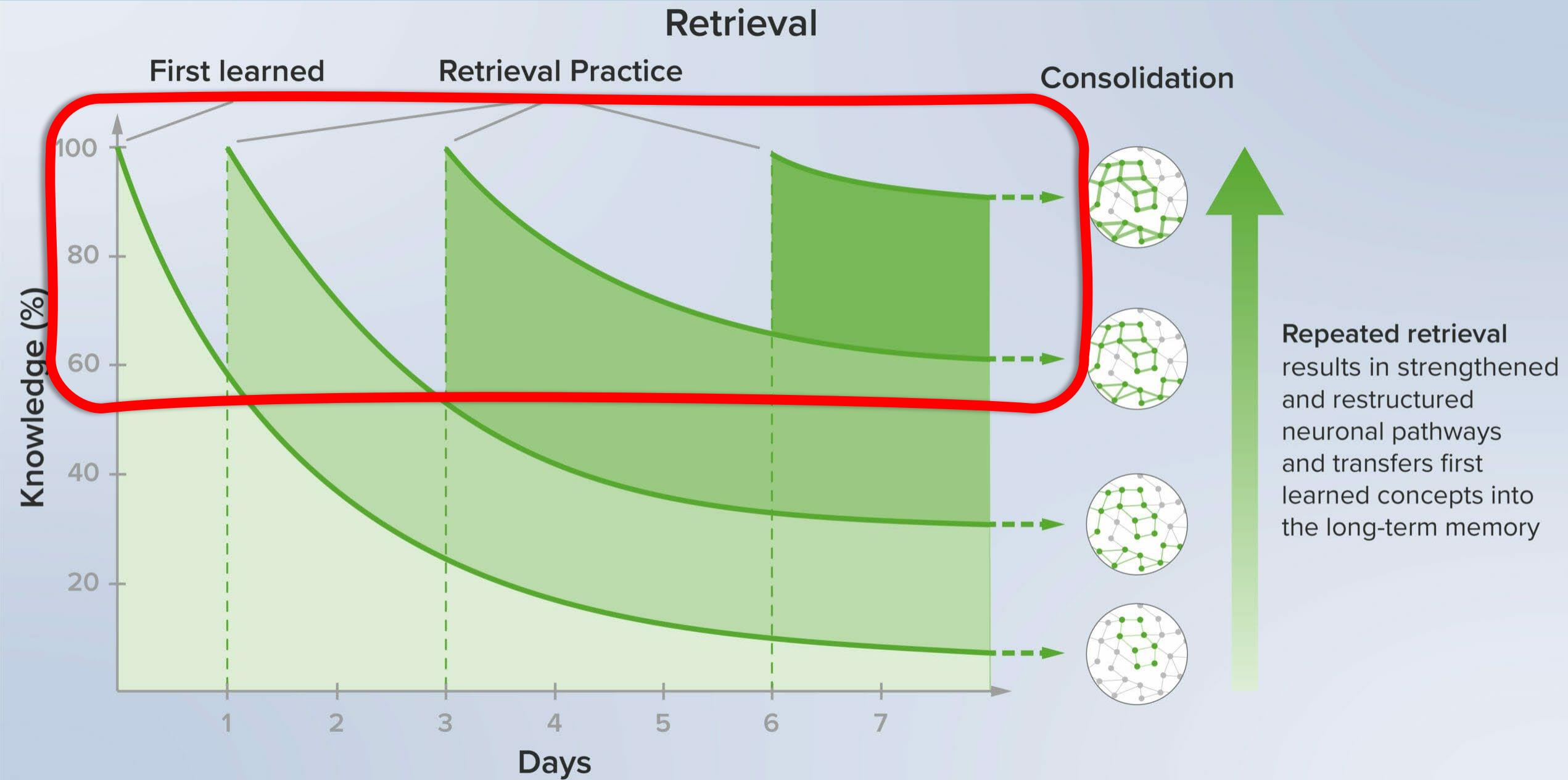


**TENBURY HIGH**  
ORMISTON ACADEMY





# Distributed retrieval



# Understanding GCSE Maths in Year 11



- Students sit three exams: two calculator papers and one non-calculator
- All topics from Years 7–11 can be assessed in any paper
- Questions test methods, reasoning, and problem solving skills may be presented as a calculation or imbedded into a worded problem

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

**GCSE Higher Tier Checklist**

1Q4

**Corbettmaths**

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 219  
Best Buys - Video 210  
Converting Fractions - Video 146  
Conversion Graphs - Video 151, 152  
LCM/HCF - Video 218, 219  
Product of Primes - Video 223, 224  
Indices - Video 172, 174  
Indices (fractional/negative) - Video 173, 175  
Standard Form - Video 300, 301, 302, 303  
Percentages of Amounts - Video 234, 235, 238  
Percentage Change - Video 233  
Simple Interest - Video 241  
Compound Interest - Video 246  
Reverse Percentages - Video 240  
Recurring Decimals to Fractions - Video 96  
Ratio - Video 270, 271, 271a, 271c  
Direct Proportion - Video 254  
Inverse Proportion - Video 255  
Proportion Graphs - Video 255  
Proportion - Video 255, 256, 256c  
Limits of Accuracy - Video 183, 184  
Surds - Video 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 - Video 21, 22, 23, 24  
Simplifying Fractions - Video 288, 289  
nth Term (quadratic) - Video 388  
Substitution - Video 20  
Equations - Video 110, 113, 114, 115  
Changing the Subject - Video 7, 8  
Inequalities - Video 177, 178, 179  
Inequalities (Regions) - Video 182  
Quadratic Inequalities - Video 378  
Linear Equations - Video 180, 186, 189, 194  
Midpoint of a Line - Video 152  
Distance between 2 points - Video 185  
Real-life Linear Graphs - Video 170  
Parallel or Perpendicular Lines - Videos 196, 197  
Simultaneous Equations - Video 295  
Non-linear Simultaneous Equations - Video 298  
Graphical Simultaneous Equations - Video 297

Angles in Parallel Lines - Video 25, 39  
Bearings - Video 26, 27  
Angles in Polygons - Video 32  
Constructions - Video 78, 72, 79, 80, 70  
Views - Video 354  
Loci - Video 75, 76, 77  
Area of a Trapezium - Video 48  
Circumference - Video 60  
Arc Length - Video 58  
Area of a Sector - Video 48  
Area of a Cylinder - Video 357  
Surface Area of a Cylinder - Video 259  
Volume of a Prism - Video 358  
Volume of a Cone/Triangular Prism - Video 330, 331  
Volume of a Prism - Video 359  
Volume of a Prism - Video 360  
Surface Area of a Prism - Video 311  
Surface Area of a Cone/Sphere - Videos 314, 315  
Metric Units (area/volume) - Videos 350, 351  
Translations - Video 325  
Reflections - Video 272  
Rotations - Video 275  
Enlargements - Video 104, 106, 107, 108  
Similar Shapes - Videos 292, 293a, 293b  
Circle Theorems - Video 64, 65  
Cosine Rule - Video 333  
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  
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

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 rate 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

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  
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Two-way Tables - Video 319  
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Venn Diagrams - Video 380

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

**GCSE Foundation Tier Checklist**

1Q4

**Corbettmaths**

Multiplication - Video 199, 200  
Division - Video 98  
Addition - Video 99  
Subtraction - Video 304  
Sensible Estimation - 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 150  
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  
Tension - Video 325, 326  
Reflections - Video 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

Tally Charts - Video 321  
Frequency Table - Video 375  
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  
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  
Percentages - 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 Table - Video 375  
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Bar Charts - Videos 147, 148  
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Averages & Range - Videos 56, 50, 53, 57  
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Fractions, Decimals, Percentages - Videos 121 to 129  
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Error Intervals - Video 377  
Money - Video 400  
Best Buys - Video 210  
Proportion - Videos 255a, 254  
Use of a Calculator - Video 352



# The Role of Parents in Supporting Revision



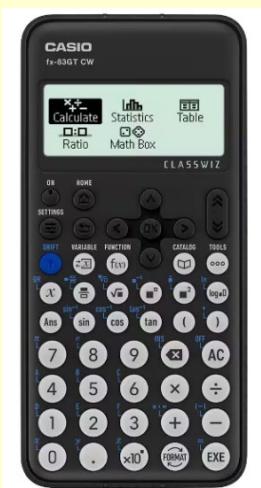
- You do not need to know how to do the maths yourself, I will show you some resources which can support your child
- Your encouragement and routines make a big difference
- Helping students stay organised and motivated is key
- Positive attitudes towards maths build confidence
- Pointing students in the right direction and helping them to know what to study and when is key



# Creating a Strong Revision Routine at Home



- Encourage short, regular revision sessions (20–40 minutes)
- Maths revision is most effective when done little and often
- Support the use of a revision timetable
- Most pupils will need to focus on A01 skills first so they can remember how to do a particular skill then they need to add difficulty by trying reasoning and problem solving questions. If they start with the more difficult skill it can be discouraging as it will seem too difficult so start by building confidence then build complexity.
- As exams draw closer, complete past exam papers in timed conditions to replicate the exam environment (90 minutes)



# The revision cycle. Start by finding out what they do/don't know...



Assess the impact of the revision!

Active revision



What do/ don't they know?



**Question 3** ✓  
167 mins  
288c Determine if a triangle is right-angled or if it is possible to construct (converse of Pythagoras' theorem). [Review](#)

**CORRECT ANSWER:**  
[See full markscheme](#)  
The triangle can not be constructed.

**STUDENT ANSWER:**  
The triangle can not be constructed.

**Question 4** ✗  
167 mins  
288d Use Pythagoras' theorem to find a length in an isosceles triangle. [Review](#)

**CORRECT ANSWER:**  
[See full markscheme](#)  
 $y = 8.5 \text{ cm}$

**STUDENT ANSWER:**  
 $y = \text{idk cm}$

*PQR* is an isosceles triangle where  $PQ = QR$ .

Find the length marked  $y$  on the diagram. Give your answer correct to 1 decimal place.

[Write a new comment](#)

**Next steps to improve learning/assessment**

Highlight the #s that apply to you. Response to your relearning tasks in red pen on your exam paper / in your book.

#1. Revisit Pythagoras's formula and substitute given values while redoing question 4. Be aware of the type of triangle being used and how that affects the equation.

#2. Revisit trigonometry in split triangles on a perpendicular for two right-angled triangles, then redo your response to question 5.

#3. You need to reference each value in your method. Redo your response to question 9 with more of your method written.

#4. You need to be more accurate during your method and not round too much too soon. Redo your response to question 3 and try to round at the very end.

#5. You need to keep  $\sqrt{3}$  as a surd (in square root form). Redo your response to question 9 using this.

- Writing out method / what you type and get on your calculator display.
- Be careful and avoid early rounding as it reduced accuracy.



End of Unit Assessment

GM5 – Right-angled Triangles

Surname		Forename	
Centre number		Candidate number	
Class teacher		Total marks available	
Raw marks scored	/	Percentage	%

Question Level Analysis (raw marks to be inputted by pupils)			
Question Number	Raw Mark	Question Number	Raw Mark
1	6		
2	7		
3	8		
4	9		
5			



Please write clearly in block capitals.

Centre number  Candidate number

Surname \_\_\_\_\_  
Forename(s) \_\_\_\_\_  
Candidate signature \_\_\_\_\_  
I declare this is my own work.

GCSE  
MATHEMATICS

Higher Tier Paper 1 Non-Calculator

Friday 19 May 2023 Morning Time allowed: 1 hour 30 minutes

H

Materials

- mathematical instruments
- the Formulae Sheet (enclosed).



You must not use a calculator.

Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in the book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.

Advice

In all calculations, show clearly how you work out your answer.

For Examiner's Use	
Pages	Mark
2-3	
4-5	
6-7	
8-9	
10-11	
12-13	
14-15	
16-17	
18-19	
20-21	
22-23	
TOTAL	



IB/Mun23/E8

8300/1H



# Revision checklist (KS4)

Assess the impact of your revision!

What do you /don't you know?

Active revision

Key Knowledge Points

Unit	Spec. Re	Stran	Substrand	Knowledge	Tier	Sparx Cod	Corbett Maths	knowledge	Y10 Mid	Before	After
NP9	N6	Number	Roots and powers	Estimating roots and powers	H	U299					
NP9	N2	Number	Number skills	Using a calculator	F	U926	352				
A2	A4	Number	Index rules	Index rules with positive indices	F	U235	174				
A2	A4	Number	Index rules	Index rules with negative indices	F	U694	175				
NP9	N14	Number	Rounding	Estimating calculations	F	U225	215				
NP9	N15	Number	Rounding	Finding error intervals	F	U657	377				
NP9	N15	Number	Rounding	Truncating decimals	F	U108					
NP9	N15	Number	Rounding	Finding error intervals for truncated numbers	F	U301					
NP8	N10	Number	Fractions, decimals and percentages	Converting between fractions, decimals and percentages	F	U888	130				
NP8	N1	Number	Fractions, decimals and percentages	Ordering fractions, decimals and percentages	F	U594	131				
NP8	R9	Number	Fractions, decimals and percentages	Writing numbers as percentages of other numbers	F	U925	237				
NP8	R9	Number	Fractions and percentages of amounts	Finding percentages of amounts without a calculator	F	U554	234				
NP8	R9	Number	Fractions and percentages of amounts	Finding percentages of amounts with a calculator	F	U349	235				
NP8	R9	Number	Percentage change	Percentage change without a calculator	F	U773	233				
NP8	R9	Number	Percentage change	Percentage change with a calculator	F	U671	233				
NP8	R9	Number	Percentage change	Finding original values in percentage calculations	F	U286	240				
NP8	R9	Number	Percentage change	Finding the percentage an amount has been changed by	F	U278	240				
A2	A1	Algebra	Algebraic notation	Using algebraic notation	F	U613	19				
A1	A2	Algebra	Substituting	Substituting into expressions	F	U201	20				
A2	A4	Algebra	Simplifying expressions	Simplifying expressions by collecting like terms	F	U105	9				
A2	A4	Algebra	Simplifying expressions	Simplifying expressions using index laws	F	U662	174				
A3	A4	Algebra	Brackets	Expanding single brackets	F	U179	13				
A3	A4	Algebra	Brackets	Expanding double brackets	F	U768	14				
A3	A4	Algebra	Brackets	Factorising into one bracket	F	U365	117				
A1	A17	Algebra	Solving equations	Solving equations with one step	F	U755	110				



# Use the QLA

Assess the impact of your revision!

What do you /don't you know?



Active revision

Year 11 Mock (Foundation) Exam Feedback Sheet PAPER 1

<b>Q</b>	<b>Knowledge</b>	<b>Spec Ref</b>	<b>A0</b>	<b>Max Mark</b>	<b>My Mark</b>
<b>1a</b>	Sequence	A23	A01	1	1
<b>1b</b>	Sequence	A23	A01	1	1
<b>1c</b>	Sequence including negative	A23	A03	1	1
<b>1d</b>	Negative product	N2	A01	1	1
<b>2a</b>	Multiples	N4	A01	1	1
<b>2b</b>	Factors	N4	A01	1	1
<b>2c</b>	Prime number	N4	A01	1	1
<b>2d</b>	Square number	N6	A01	1	1
<b>3</b>	Pictogram problem	S2	A02	3	3
<b>4a</b>	Reading value from graph	A14	A02	1	1
<b>4b</b>	Ratio from graph	R10 A14	A02	2	2
<b>5</b>	multiplication	N3	A01 (1) A03(2)	3	3
<b>6</b>	Money and profit problem	R11 N2(2)	A01 (1) A03(2)	3	0
<b>7a</b>	Money problem using assumption	N2	A03	3	1
<b>7b</b>	Effect of assumption	N2	A03	1	0
<b>8</b>	Recipe problem	R10	A01 (1) A02 (2)	3	0
<b>9a</b>	Simplify ratio	R4	A01	3	3
<b>9b</b>	Probability	P7	A01	1	1
<b>10</b>	Substitute into expression, indices	N6 A2(2)	A01	3	3
<b>11</b>	Construct circle from diameter	G2	A03	1	1
<b>12a</b>	Fraction of a quantity	N2, NI2	A01	3	3
<b>12b</b>	Divide in a ratio	R5	A01	3	3
<b>13</b>	Angles on a straight line	A3(2) G3	A01	3	3
<b>14a</b>	Calculation	N3 NI4	A01	3	1
<b>14b</b>	Check by rounding	N14	A03	1	1
<b>15a</b>	Diameter to radius	G9	A02	1	1
<b>15b</b>	Sphere volume in terms of pi	N8 G17	A01	2	1
<b>16a</b>	Inverse proportion	A2(2) R10	A01	3	0

# Now let's work on the areas you do not know!



Assess the impact of your revision!



What do you /don't you know?



Active revision

Formula for area of a circle

Formula for compound interest

The image shows a digital platform interface. On the left, a student dashboard for 'Tenbury High Ormiston Academy' displays 'What to work on next?' with 'Start a Practice' and 'My Homework' sections. On the right, a marking grid for 'Demo 114/Ma [HWA]' shows a question (Q) with answer (0.35), mark (B1), and comments ('oe'). An 'Additional Guidance' section provides instructions for marking. The grid also lists four examples of working (eg1 to eg4) and their corresponding marks (B1, B1, B0, B0).

The image shows the homepage of 'The GCSE Maths Tutor' YouTube channel. It features the channel logo (an owl with glasses), subscriber count (277K), and a 'Subscribed' button. Below the channel info, there are links to 'Home', 'Videos', 'Shorts', 'Playlists', 'Community', 'Store', and a search bar.

The image shows the navigation bar of the 'onmaths' website, which includes links for 'Predicted Papers', 'Mini Predicted Papers', 'Topics', 'Demon Questions', and 'Mini Mocks'.

## Videos and Work

Click here for answers

2D shapes: names [Video 1](#) [Practice Questions](#) 1

2D shapes: quadrilaterals [Video 2](#) [Practice Quest](#)

3D shapes: names [Video 3](#) [Practice Questions](#) 1



2025 GCSE maths  
Start preparing now  
[TOPICS] Every GCSE maths topic  
[MINI MOCKS] 20 minute practice papers  
[PREDICTIONS] Full practice papers  
[HALF PREDICTIONS] Half-length practice papers  
[DEMON QUESTIONS] Only the hardest questions

Remaining Topics  
Which topics do you need to revise for paper 3?  
A list of tasks for every topic that you should prioritise for paper 3.

Grade 4 course  
Designed for results  
We have started writing a complete course to help students achieve grade 4.

Courses  
A level and GCSE  
We have started writing courses for all students studying GCSE and A Level Maths.

Revision notes  
Where do you start with your revision?  
Ultimate subscribers can download our daily revision

Revision central  
Do you need to organise your revision?  
Revision central is a great area to find all of our resources.

AQA

Please write clearly in block capitals.  
Centre number  Candidate number   
Surname   
Forename(s)   
Candidate signature   
I declare this is my own work.

GCSE  
MATHEMATICS

Higher Tier Paper 2 Calculator

Wednesday 7 June 2023 Morning Time allowed: 1 hour 30 minutes

**Materials**  
For this paper you must have:

- a calculator
- mathematical instruments
- the Formula Sheet (enclosed).

**Instructions**  
Use black ink or black ball-point pen.

- Fill in the boxes at the top of this page.
- Answer all questions.
- Write your answers in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

H

# Revision Team (KS4)



Maths (F and H) Posts Files ...

+ New Upload Edit in grid view Share Copy link Sync ... All Documents ... ...

**Maths (F and H)**

<span>File</span>	Name	Modified	Modified By	+ Add column
<span>Folder</span>	001 Specification	July 30, 2024	Kit Williams	
<span>Folder</span>	002 Revision checklist	July 30, 2024	Kit Williams	
<span>Folder</span>	003 Vocabulary and definitions	July 30, 2024	Kit Williams	
<span>Folder</span>	004 Revision lessons	July 30, 2024	Kit Williams	
<span>Folder</span>	005 End of unit tests and marks schemes	July 30, 2024	Kit Williams	
<span>Folder</span>	006 Past exams papers and mark schemes	July 30, 2024	Kit Williams	
<span>File</span>	007 Revision Mats (printed in tutor rooms)	6 hours ago	Harry Watts	
<span>File</span>	GCSE Maths Tutor YOUTUBE.url	About a minute ago	Harry Watts	
<span>File</span>	How to set up On Maths and watch Corbett...	9 minutes ago	Harry Watts	
<span>File</span>	How to use Dr Frost for revision.pdf	9 minutes ago	Harry Watts	

We will continue to add more to this channel throughout the rest of the year

<https://teams.microsoft.com/v2/>

[https://ormistonacademiestrust.sharepoint.com/:f/r/sites/msteams\\_d7b9cb/Shared%20Documents/Maths%20\(F%20and%20H\)?csf=1&web=1&e=on8KYi](https://ormistonacademiestrust.sharepoint.com/:f/r/sites/msteams_d7b9cb/Shared%20Documents/Maths%20(F%20and%20H)?csf=1&web=1&e=on8KYi)



# Using Exam Questions (KS4)

Maths (F and H) > 006 Past exams papers and mark schemes

Name	Modified	Modified By	+ Add column
June 2017	July 30, 2024	Kit Williams	
June 2018	July 30, 2024	Kit Williams	
June 2019	July 30, 2024	Kit Williams	
June 2022 - Mocks from 2023	July 30, 2024	Kit Williams	
November 2019	July 30, 2024	Kit Williams	
November 2020	July 30, 2024	Kit Williams	
November 2021	July 30, 2024	Kit Williams	
Practice Papers	July 30, 2024	Kit Williams	

Maths (F and H) > 006 Past exams papers and mark schemes > June 2018

Name	Modified	Modified By	+ Add column
Foundation MS Paper 1 June 18.pdf	July 30, 2024	Kit Williams	
Foundation MS Paper 2 June 18.pdf	July 30, 2024	Kit Williams	
Foundation MS Paper 3 June 18.pdf	July 30, 2024	Kit Williams	
Foundation Paper 1 June 18.pdf	July 30, 2024	Kit Williams	
Foundation Paper 2 June 18.pdf	July 30, 2024	Kit Williams	
Foundation Paper 3 June 18.pdf	July 30, 2024	Kit Williams	
Higher MS Paper 1 June 18.pdf	July 30, 2024	Kit Williams	
Higher MS Paper 2 June 18.pdf	July 30, 2024	Kit Williams	
Higher MS Paper 3 June 18.pdf	July 30, 2024	Kit Williams	
Higher Paper 1 June 18.pdf	July 30, 2024	Kit Williams	
Higher Paper 2 June 18.pdf	July 30, 2024	Kit Williams	
Higher Paper 3 June 18.pdf	July 30, 2024	Kit Williams	

They can access previous exams through teams and then mark their answers using the mark scheme.

They can use Corbett Maths and their revision guide to help with answering questions they find challenging.

# Using Exam Questions (KS4)



First Class Maths has targeted topic revision with revision videos and they can check their answers.

  
**SCAN ME**

**Algebraic Fractions (Equations)**

  
**SCAN ME**

REVISE THIS TOPIC      CHECK YOUR ANSWERS

1 Solve  $\frac{x+9}{5} + \frac{x+2}{4} = 5$  [3 marks]

Handwriting practice lines for the equation.

Topic	Video Explanation	Exam Questions	Solutions	Grade	Past Series Appearance*
Algebraic Fractions (Equations)					36%
Algebraic Fractions (Simplifying)					91%
Algebraic Proof					55%
Circle Theorems Proofs					0%
Equation of a Tangent to a Circle					36%
Non-linear Simultaneous Equations					45%
Quadratic Inequalities					45%
Rationalise the Denominator					55%
Speed Time Graphs					91%
Transformations of Graphs					64%
Vectors (Higher)					82%
3D Trig and Pythagoras					55%
Algebraic Fractions (Operations)					91%
Area of a Triangle (Using Trig)					73%

# Using Sparx as a revision resource



**Sparx Maths** Independent Learning

440 XP Queen of Maths

Compulsory

XP Boost

Target

Independent Learning

[Independent learning](#) > [Geometry](#) > [Geometric proofs](#)

**Geometric proofs with congruence and similarity – U887**

✓ ★ ★ ★ ⓘ

**Show building blocks**

**Writing proofs that involve congruence**

Introduce	Question 1 <a href="#">Answer</a>	Question 2 <a href="#">Answer</a>	Question 3 <a href="#">Answer</a>	Question 4 <a href="#">Answer</a>	Question 5 <a href="#">Answer</a>
Strengthen	Question 1 <a href="#">Answer</a>	Question 2 <a href="#">Answer</a>	Question 3 <a href="#">Answer</a>	Question 4 <a href="#">Answer</a>	Question 5 <a href="#">Answer</a>
Deepen	Question 1 <a href="#">Answer</a>	Question 2 <a href="#">Answer</a>	Question 3 <a href="#">Answer</a>	Question 4 <a href="#">Answer</a>	

# Using CorbettMaths as a revision resource



## 5-a-day GCSE 9-1

Numeracy 5aday – broadly designed for students aiming for Grades 1, 2 and 3.

Foundation – broadly designed for students aiming for Grades 3 and 4.

Foundation Plus – broadly designed for students aiming for Grades 4, 5 and 6.

Higher – broadly designed for students aiming for Grades 6 and 7.

Higher Plus – broadly designed for students aiming for Grades 8 and 9.

1st January	Higher Plus 5-a-day
Prove $(2n + 2)^2 - (2n + 1)$ is always odd for all positive values of n.	Corbettmaths
Rationalise the denominator $\frac{3 + \sqrt{2}}{\sqrt{3}}$	
Shown is $f(x)$ 	Sketch the function $f(x + 1)$ 
$f(x) = 3x + 2$ $g(x) = x^2$ Find $fg(x)$	Find $gf(5)$

# Using CorbettMaths as a revision resource



## Videos and Worksheets

**Click here for answers**

2D shapes: names [Video 1](#) [Practice Questions](#) [Textbook Exercise](#)

2D shapes: quadrilaterals [Video 2](#) [Practice Questions](#) [Textbook Exercise](#)

3D shapes: names [Video 3](#) [Practice Questions](#) [Textbook Exercise](#)

3D shapes: nets [Video 4](#) [Practice Questions](#) [Textbook Exercise](#)

3D shapes: vertices, edges, faces [Video 5](#) [Practice Questions](#) [Textbook Exercise](#)

Addition: column method [Video 6](#) [Practice Questions](#) [Textbook Exercise](#)

Question 1: Solve the following equations using the quadratic formula.  
Give your answers to 1 decimal place.

(a)  $x^2 + 5x + 1 = 0$  (b)  $2x^2 + 7x + 2 = 0$  (c)  $4x^2 + 8x + 3 = 0$

(d)  $x^2 + 2x - 4 = 0$  (e)  $3x^2 + 4x - 5 = 0$  (f)  $2x^2 + 5x - 10 = 0$

(g)  $x^2 - 4x + 2 = 0$  (h)  $7x^2 - 6x + 1 = 0$  (i)  $3x^2 - 10x + 4 = 0$

(j)  $x^2 - x - 11 = 0$  (k)  $x^2 - 6x - 20 = 0$  (l)  $2x^2 - x - 9 = 0$

(m)  $9x^2 - 12x + 2 = 0$  (n)  $4x^2 + 4x + 1 = 0$  (o)  $8x^2 - 8x - 9 = 0$

(p)  $2x^2 + 3x - 100 = 0$  (q)  $3x^2 - 23x - 67 = 0$  (r)  $2x^2 + 16x + 1 = 0$

Question 2: Solve the following equations using the quadratic formula.  
Give your answers to 2 decimal places.

(a)  $x^2 + 7x = 20$  (b)  $2x^2 = 9x + 40$  (c)  $3x^2 = 10 - 2x$

(d)  $x^2 - 8 = x$  (e)  $7x = 13 - x^2$  (f)  $4x^2 - 9 = 2x^2 + 4x$

Deriving the Quadratic Formula

Watch Later

Share

Watch on YouTube

# Using CorbettMaths as a revision resource



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 214

Conversion Graphs - Video 151, 152

LCM/HCF - Videos 218, 219

Product of Primes - Videos 223, 224

Indices - Videos 172, 174

Indices (Multiplication) - Videos 173, 175

Indices (Division) - Videos 176, 178

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, 272, 273, 274, 275c

Direct Proportion - Video 283

Inverse Proportion - Video 288

Proportional Graphs - Video 295b

Proportion (application) - Video 295c

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 - Videos 113, 114, 115

Factorising Quadratics - Videos 119, 120, 194a

Algebraic Fractions - Videos 21, 22, 23, 108

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, 179

Equivalents (Rational) - Video 182

Quadratic Equations - Video 188

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

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Non-linear Simultaneous Equations - Video 298

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Types of Angle - Video 38

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Angles in a Triangle - Video 37

Angles in a Quadrilateral - Video 33

Angles in Polygons - Video 32

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Perimeter - Video 241

Area of a Rectangle - Video 45, 49

Area of a Trapezium - Video 48

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Rotational Symmetry - Video 317

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Faces, Edges, Vertices - Videos 5, 3

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Views and Elevations - Video 354

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Time Zones - Video 320

Distance Charts - Video 318

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Volume of a Sphere/Cone - Video 359, 361

Surface Area of a Sphere - Video 310

Surface area of Sphere/Cone - Video 313, 314

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Use of a Calculator - Video 352

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

GCSE Higher Tier  
1Q4  
Checklist



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Solving Equations - Video 110, 113, 266  
Forming Equations - Video 110  
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GCSE Foundation Tier  
1Q4  
Checklist



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Place Value - Video 222, 222a  
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Best Buys - Video 210

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Forming Equations - Video 110  
Fractions, Decimals, Percentages - Videos 121 to 129  
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Percentage Change - Video 233  
Simple Interest - Video 236a  
Compound Interest - Video 236b  
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  
Best Buys - Video 210

Sequences - Videos 286, 287, 290, 287a  
Geometric Progressions - Video 375  
The nth Term - Video 288  
Expansion Brackets - Videos 13, 14  
Factorising - Video 117  
Factorising Quadratics - Videos 118, 120  
Solving Equations - Video 110, 113, 266  
Forming Equations - Video 110  
Fractions, Decimals, Percentages - Videos 121 to 129  
Percentages of Amounts - Videos 234, 235, 238  
Percentage Change - Video 233  
Simple Interest - Video 236a  
Compound Interest - Video 236b  
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  
Best Buys - Video 210

## A Bit of Everything Paper

[AQA Higher – A Bit of Everything Paper](#)

[AQA Higher – A BIT OF EVERYTHING answers Q1 to Q50](#)

[AQA Higher – A BIT OF EVERYTHING answers Q51 to Q98](#)

## Practice Papers

[Higher Set A Paper 1 – Non Calculator](#)

[Higher Set A Paper 2 – Calculator](#)

[Higher Set A Paper 3 – Calculator](#)

[Higher Set B Paper 1 – Non Calculator](#)

[Higher Set B Paper 2 – Calculator](#)

[Higher Set B Paper 3 – Calculator](#)

[Higher Set C Paper 1 – Non Calculator](#)

[Higher Set C Paper 2 – Calculator](#)

[Higher Set C Paper 3 – Calculator](#)

[Higher Set D Paper 1 – Non Calculator](#)

[Higher Set D Paper 2 – Calculator](#)

[Higher Set D Paper 3 – Calculator](#)

## A Bit of Everything Paper

[AQA Foundation – A Bit of Everything Paper](#)

[AQA Foundation – A BIT OF EVERYTHING answers Q1 to Q50](#)

[AQA Foundation – A BIT OF EVERYTHING answers Q51 to Q116](#)

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[Foundation Set B Paper 1 – Non Calculator](#)

[Foundation Set B Paper 2 – Calculator](#)

[Foundation Set B Paper 3 – Calculator](#)

[Foundation Set C Paper 1 – Non Calculator](#)

[Foundation Set C Paper 2 – Calculator](#)

[Foundation Set C Paper 3 – Calculator](#)

[Foundation Set D Paper 1 – Non Calculator](#)

[Foundation Set D Paper 2 – Calculator](#)

[Foundation Set D Paper 3 – Calculator](#)



# Using GCSE Maths Revision Guides

- Revision guides provide clear summaries of key GCSE Maths topics
  - They are useful for refreshing knowledge before practising questions
  - Students should combine reading with practice, not just passive reading
  - Highlighting key points and making notes can help improve recall but the only way to embed the learning is to do example questions



# Time to assess the impact of your revision!



Assess the impact of your revision!

Active revision

What do you /don't you know?



Q	Answer	Mark	Comments
	(0).35	B1	oe
<b>Additional Guidance</b>			
Mark the answer line. If this is blank, mark the working			
1(a)	If values are given in one or more forms, either on the answer line or in working with nothing on the answer line, all values must be correct  eg1 $0.35 = \frac{7}{20}$ on answer line  eg2 $\frac{35}{100}$ and 3.5 in working with $\frac{35}{100}$ on answer line  eg3 $\frac{35}{100}$ and 3.5 in working with 3.5 on answer line  eg4 $\frac{35}{100}$ and 3.5 in working with answer line blank	B1  B1  B0  B0	

**AQA**

Please write clearly in block capitals.

Centre number  Candidate number

Surname   
Forename(s)   
Candidate signature   
I declare this is my own work.

**GCSE MATHEMATICS**  
Higher Tier Paper 2 Calculator

Wednesday 7 June 2023 Morning Time allowed: 1 hour 30 minutes

**Materials**  
For this paper you must have:

- a calculator
- mathematical instruments
- the Formulae Sheet (enclosed).

**Instructions**  
Use black ink or black ball-point pen.

- Fill in the boxes at the top of this page.
- Answer all questions.
- Write your answers in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

**onmaths**

SIGN IN SIGN UP

Predicted Papers Mini Predicted Papers Topics Demon Questions Mini Mocks

**Remaining Topics**  
Which topics do you need to revise for paper 3?  
A list of tasks for every topic that you should prioritise for paper 3.

**Grade 4 course**  
Designed for revises  
We have started writing a complete course to help students achieve **grade 4**.

**Courses**  
**A level and GCSE**  
We have started writing courses for all students studying GCSE and A Level Maths.

**2025 GCSE maths**  
Start preparing now

**[TOPICS]** Every GCSE maths topic

**[MINI MOCKS]** 20 minute practice papers

**[PREDICTIONS]** Full practice papers

**[HALF PREDICTIONS]** Half-length practice papers

**[DEMON QUESTIONS]** Only the hardest questions

**The revisionator**  
Want a completely randomised paper?  
The Revisionator will generate a random paper weighted by

**Revision notes**  
Where do you start with your revision?  
Ultimate subscribers can download our daily revision

**Revision central**  
Do you need to organise your revision?  
Revision central is a great area to find all of our resources.

# Common Maths Revision Mistakes to Avoid



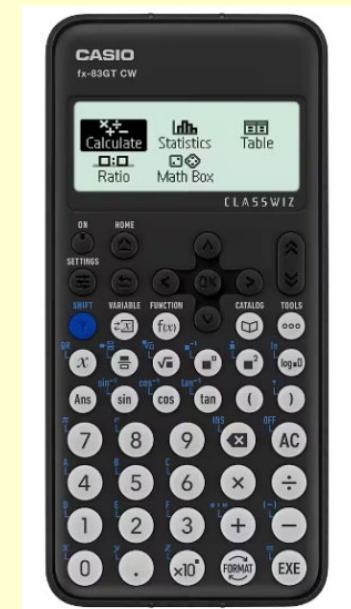
- Cramming revision into long sessions just before exams
  - Only revising topics students already feel confident with
  - Reading revision guides without practising questions
  - Avoiding difficult topics instead of revisiting them
  - Not checking answers or learning from mistakes



# What Effective Maths Revision Looks Like



- Short, regular revision sessions spread over time
  - A mix of topics to keep all skills active in memory
  - Using resources: Sparx, First Class Maths, Corbett Maths, Teams
  - Practising the skill then building to exam-style questions
  - Reviewing mistakes and revisiting weaker topics



# GCSE Maths Exam Technique Reminders



- Always show full working, even if unsure of the final answer
  - Marks are often awarded for correct methods
  - Encourage students to check answers if time allows
  - Use estimation to see if answers are sensible
  - Remind students to read questions carefully and BUG key information

## **Box** the command word

(this will help you structure your answer)

## **Underline** the key words

(this will help you jog your memory of any knowledge that may be relevant to the question)

## **Go back** over the question

(this will help you check your understanding of the question; for longer responses, reread the question regularly to stay on track)

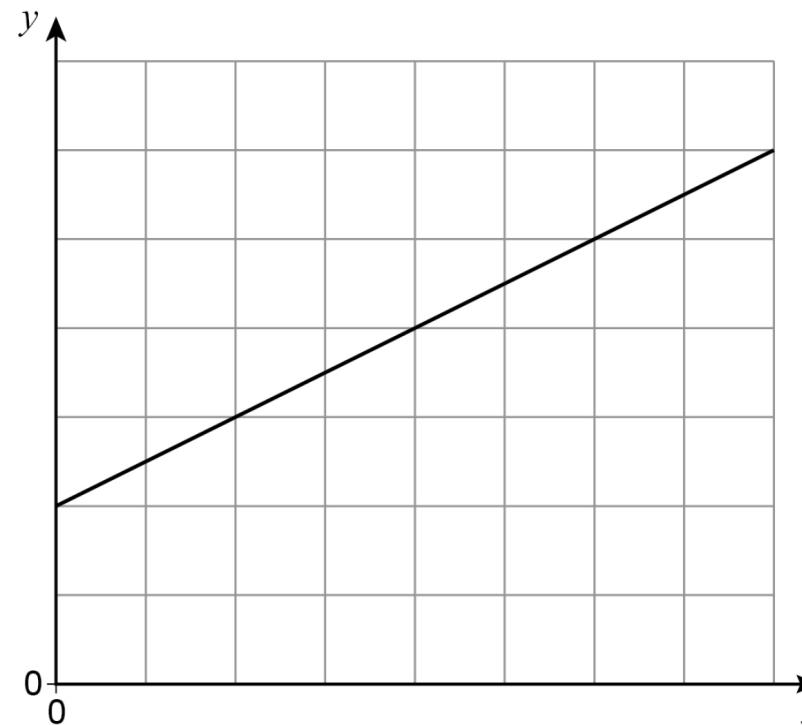




# Identify the topic

Identify the topic by looking for key vocabulary in the question

A straight line is drawn on the centimetre grid.



Fay assumes that the scale is 1 cm represents 1 unit.

(a) Use her assumption to work out the **gradient** of the line.

[1 mark]

# Identify what you are being asked to do



Command words are important.

The height of Zak is 1.86 metres.

The height of Fred is 1.6 metres.

Write the height of Zak as a fraction of the height of Fred.

Give your answer in its simplest form.



# Layout: crossing out

Make sure your working out is visible, even if you do cross out.

Factorise  $6xy - 15y^2$

$$\cancel{3y(2x - 5y)}$$

$$y(6x - 15y)$$

If you change your working out, cross out the bit you don't want marked.

Factorise  $6xy - 15y^2$

$$3y(2x - 5y)$$

$$y(6x - 15y)$$



# Layout: writing your answers

You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.

**Information** • You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.

his pay is £80

he saves 30% of this pay.

How many **more** weeks must he save?

[4 marks]

30% of £80    10% is £8     $3 \times 8 = £24$

$\begin{array}{r} 24 \\ \times 10 \\ \hline 240 \end{array}$

$\begin{array}{r} 24 \\ - 96 \\ \hline 259 \end{array}$

$24 \times 10 = 240$

$24 \times 1 = \underline{24}$   
264

11 weeks

Write the answer on  
the answer line.

Answer

11 weeks

# Answering with statements



Jing has £2450

She saves some and gives the rest to her four brothers.

money saved : money given to brothers = 2 : 5

She gives each of her **four** brothers the **same** amount.

Does each brother receive more than £430 ?

You **must** show your working.

[4 marks]

$$2+5=7$$

$$2450 \div 7 = 350$$

$$2 \times 350 = 700$$

$$5 \times 350 = 1750$$

Show your calculations.

$$1750 \div 4 = 437.50$$

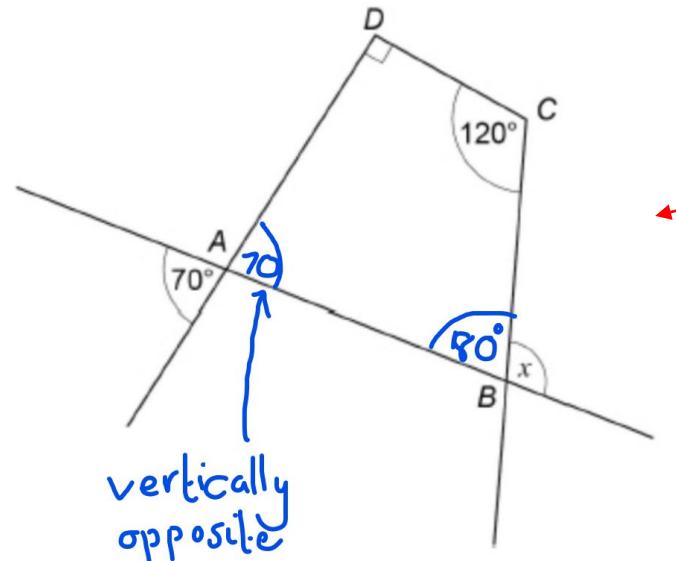
Yes. Each brother receives £437.50

Answer this question.



# Giving reasons

Sides are extended as shown.



Write on the diagram – it counts as working out!

Show that  $x = 100^\circ$

$$90 + 70 + 120 = 280^\circ$$

$360 - 280 = 80^\circ$  Angles in a quadrilateral add up to  $360^\circ$ .

$$x = 180 - 80$$

$$x = 100^\circ$$

Angles on a straight line add up to  $180^\circ$ .

Use the correct key words and write down the matching calculations.

(Total 3 marks)

# Draw a diagram



A cube has a total surface area of  $150 \text{ cm}^2$

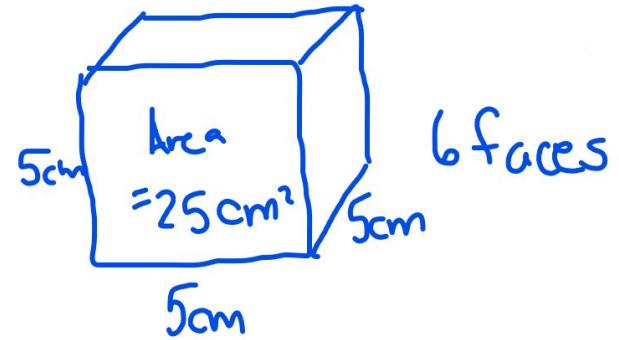
Work out the volume of the cube.

$$150 \div 6 = 25 \text{ cm}^2$$

$$25 \text{ cm}^2$$

$$\sqrt{25} = 5 \text{ cm}$$

volume  $5 \times 5 \times 5 = 125 \text{ cm}^3$



$$125 \text{ cm}^3$$

(Total for question = 4 marks)

If it's tricky – draw a piccie!

# Write down the units if they're not there



A reel holds 9.5 metres of ribbon.

2 pieces of ribbon are cut from the reel.

Each piece is 20 centimetres long.

What length of ribbon is left on the reel?

State the units of your answer.

[3 marks]

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Answer \_\_\_\_\_

You must write down your units

Here are the heights, in centimetres, of some children.

98    103    91    85    159    102    91

Which height is an outlier?

[1 mark]

Answer \_\_\_\_\_ cm

The units are already on the answer line





# Show your working out (for everything!)

Sam wants to buy a camera for £345

He has already saved £96

Each week

his pay is £80

he saves 30% of this pay.

How many **more** weeks must he save?

19	345 – 96 or 249	M1	
	80 ÷ 10 × 3 or 24	M1	oe
	their 249 ÷ their 24 or their 24 × 10 or their 24 × 11	M1	Condone 345 ÷ 24
	11	A1	

$$30\% \text{ of } £80 \quad 10\% \text{ is } £8 \quad 3 \times 8 = £24$$

$$\begin{array}{r} 345 \\ - 96 \\ \hline 249 \end{array} \quad \begin{array}{r} 24 \times 10 = 240 \\ 24 \times 1 = \underline{24} \\ \hline 264 \end{array}$$

[4 marks]

11 weeks

Answer

11 weeks



# Check your answer makes sense

Billy wants to buy these tickets for a show.

4 adult tickets at £15 each

2 child tickets at £10 each

A 10% booking fee is added to the ticket price.

3% is then added for paying by credit card.

Work out the **total** charge for these tickets when paying by credit card.

**£1796.4**

**8**

**?**

**38 tickets**

**?**

# The Formula Sheet



## Perimeter, area and volume

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

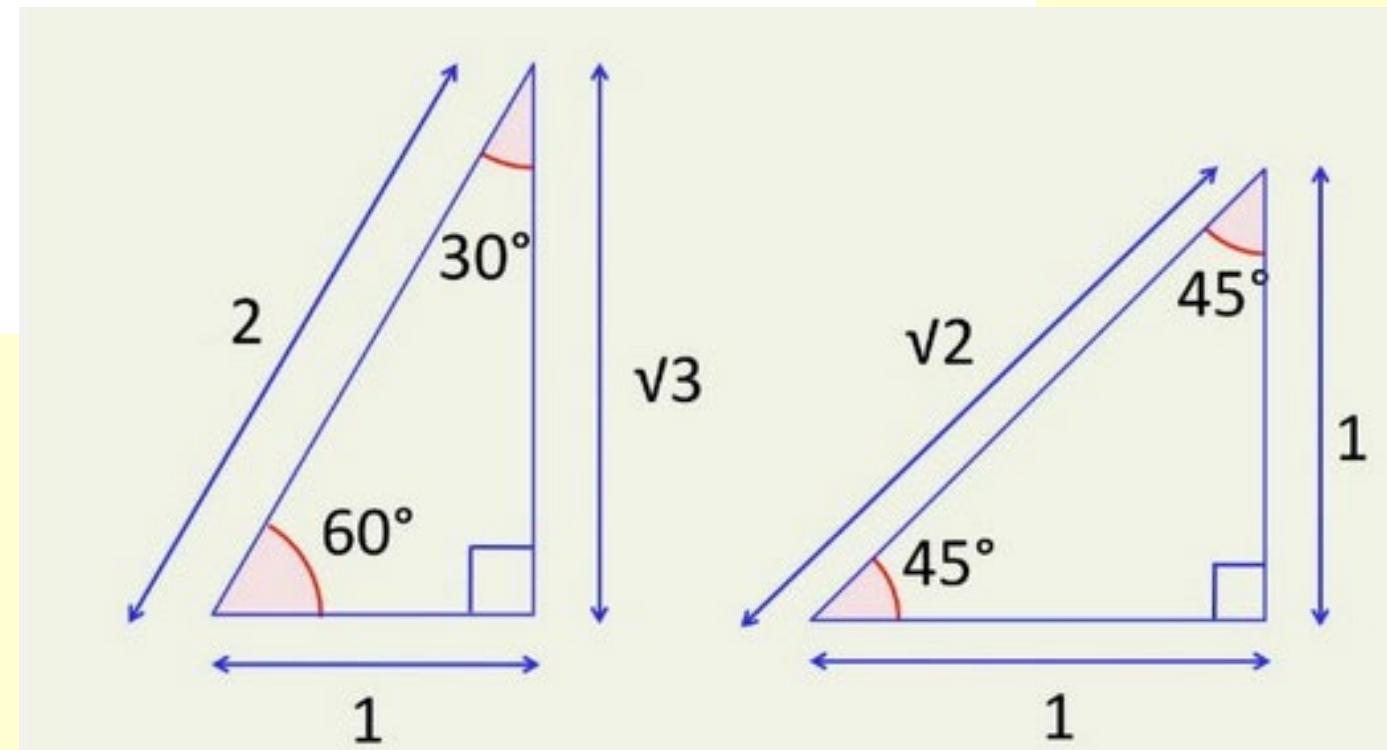
$$\text{Area of a trapezium} = \frac{1}{2} (a + b) h$$

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

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

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

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



# How Parents Can Help with Maths Revision



- Make sure your child has a scientific calculator and knows how to use it, this should be the same one they use in their exam so they know where each of the important keys are





# Equipment needed

## Materials

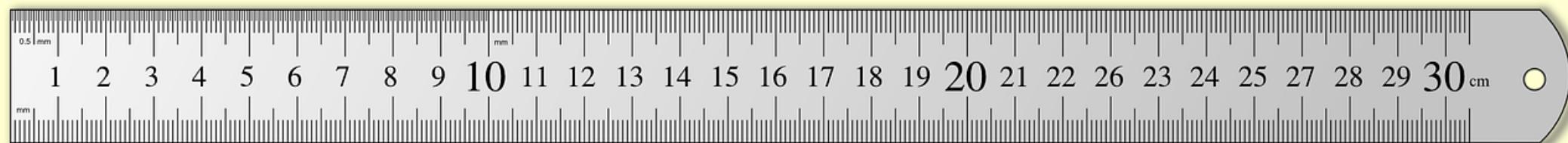
For this paper you must have:

- **mathematical instruments**

**RULER**

Used for:

- Drawing straight lines
- Measuring the length of lines





# Equipment needed

## Materials

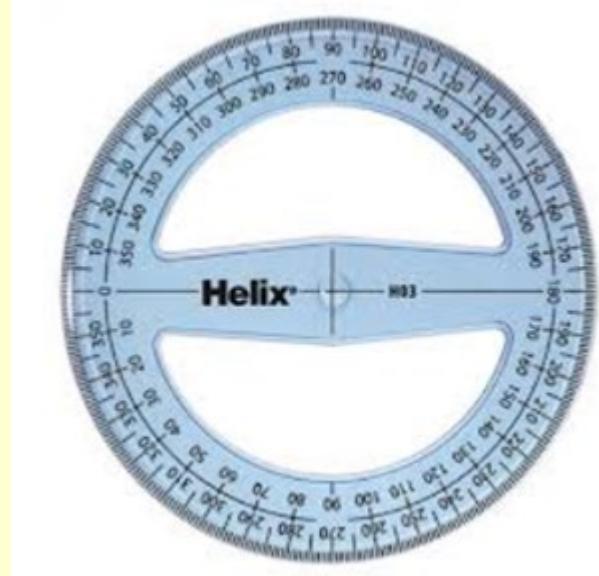
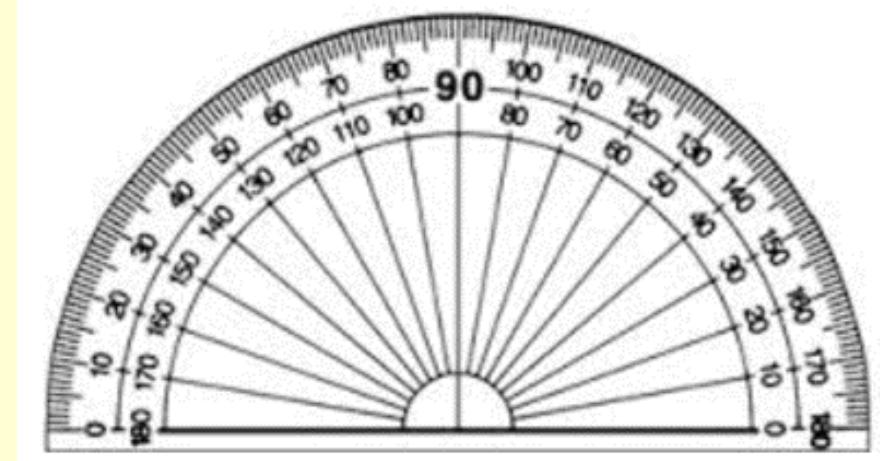
For this paper you must have:

- mathematical instruments

**PROTRACTOR**

Used for:

- Drawing angles
- Measuring angles





## Materials

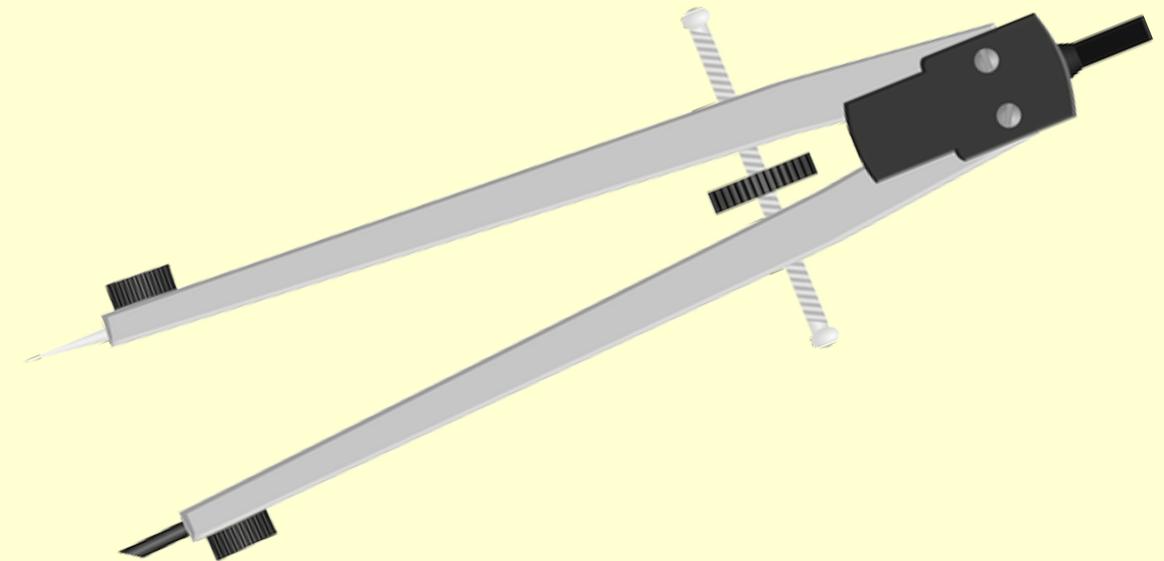
For this paper you must have:

- **mathematical instruments**

**COMPASS**

Used for:

- Drawing circles
- Drawing arcs



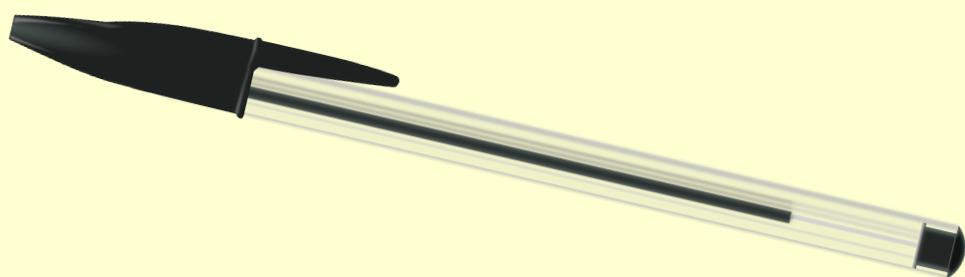


## Materials

For this paper you must have:

- **mathematical instruments**

**PEN**



Used for:

- writing

**PENCIL &  
ERASER**

Used for:

- Drawing/editing diagrams
- Drawing/editing graphs





## Materials

For this paper you must have:

**TRACING  
PAPER**

Used for:

- Tracing shapes/diagrams

**YOU CAN ASK FOR THIS**

