Mathematics Faculty



Year 11 Information Evening GCSE Mathematics

Information



- GCSE Maths is a two-year course studied in year 10 and 11.
- GCSE Maths is assessed at Foundation Tier (grades 1-5) OR Higher Tier (grades 4-9).
- All question papers must be taken at the same tier.
- Students are examined in all aspects of maths including number, algebra, geometry and statistics, with a focus on problem solving.
- The final exam consists of the following papers:
- o Paper 1: Non-Calculator (1.5 hours, 80 marks) Thursday 15th May 2025 (Morning)
- Half-Term holiday
- Paper 2: Calculator (1.5 hours, 80 marks) Wednesday 4th June 2025 (Morning)
- Paper 3: Calculator (1.5 hours, 80 marks) Wednesday 11th June 2025 (Morning)
- All content could be assessed on any of the papers.

Mathematics - Mocks



Before the main math exam, there will be two very important formal MOCK exams

- Mock 1 (November 2024). Students will sit 2 papers.
- Mock 2 (March 2025). Students will sit 3 papers.
- Final exam tiers will be determined after the results from mock exams.
- Minimum of 60% must be achieved from the cross-over questions to do higher tier.

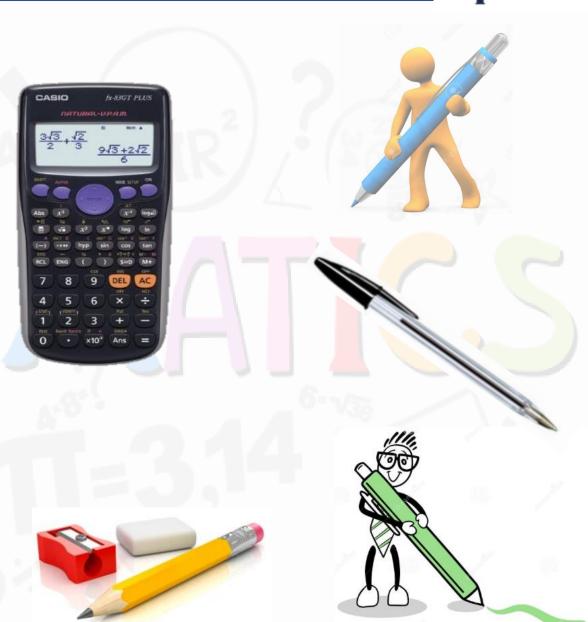


Essential Equipment for Maths Lessons/Exams



- Scientific Calculator
- Black ball point pen
- Pencil, sharpener and rubber
- Geometry set
- Green pen to mark work





Useful Websites



• **Dr Frost Maths** - provides an online learning platform, teaching resources, videos and a bank of exam questions.



 Corbett maths - maths resources: Videos, Worksheets, 5-a-day, Revision Cards and much more.



Maths Genie - Free online GCSE video tutorials, notes, exam style questions, worksheets, answers for all topics in Foundation and Higher GCSE.



Dr Frost Maths





Demo 11/ma1 Student

St Andrew the Apostle Greek Orthodox School











What to work on next?

Start a Practice

Review Progress

YOUR COURSES

Year 11 (Higher)

My Homework

- Y11 Term 1 Revision HW Due 3 days from now
- X Similar Shapes & Frustum Due 3 days ago
- Surface area and Volume 3D Due Last week

Review All

Resources

Questions & Past Papers

Lesson Resources

Dr Frost Live!

Notifications

You have been set a task by your teacher Mr U Dogan. Click to start it.

YESTERDAY

Y11 Term 1 - Revision HW

You have been set a task by your teacher Mr U Dogan. Click to start it.

LAST WEEK

Similar Shapes & Frustum

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2 WEEKS AGO

Surface area and Volume 3D

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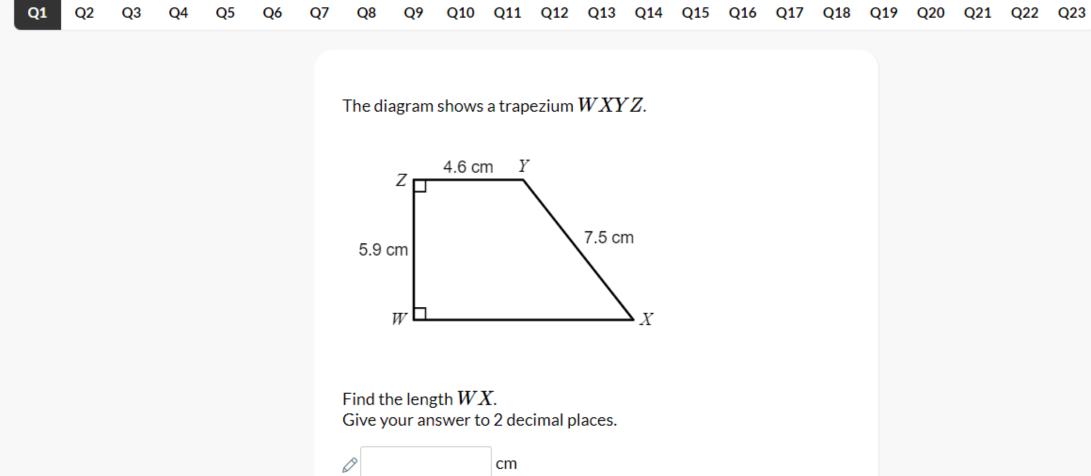
Resources



Questions & Past Papers

Dr Frost Maths





Submit Answer

COMPLETION 0%

Dr Frost Maths





Demo 11/ma1 Student

St Andrew the Apostle Greek Orthodox School

Trophies 0/37

Points This Year

= 0 = 0

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2 WEEKS AGO

Surface area and Volume 3D





Courses → Schools → St Andrew the Apostle Greek Orthodox School

Year 11 (Higher)

Unit 1 - Number

1a Calculations, checking and rounding

1b Indices, roots, reciprocals 1c Factors, multiples, primes

Unit 4 - Fractions and proportion

4a Fractions and percentages 4b Ratio and proportion

Unit 7 - Area and volume

7a Perimeter, area and circles 7b 3D shapes 7c Accuracy and bounds

Unit 2 - Algebra

2a Setting up, rearranging and solving equations
2b Sequences

Unit 5 - Angles and right-angled triangles

trigonometry

5a Polygons, angles and parallel lines 5b Pythagorasâ - Theorem and

Unit 8 - Transformations and construction

8a Transformations 8b Constructions, loci and bearings

Unit 3 - Data

3a Averages and range 3b Representing and interpreting data

Unit 6 - Graphs

6a Basics and real-life graphs
6b Linear graphs and coordinate
geometry
6c Quadratic, cubic and other
graphs

Unit 9 - Quadratics 1

9a Quadratics and simultaneous equations
9b Inequalities





St Andrew the Apostle Greek Orthodox School ightarrow Year 11 (Higher) ightarrow Unit 2 - Algebra ightarrow

2a Setting up, rearranging and solving equations

2a Setting up, rearranging and solving equations 12 skills
2b Sequences 6 skills

136 Basic substitution with positive integers subtraction, division and multiplication) Mastery: 0/100	(limited	to ac	ddition,	
Practise				
OR NARROW DOWN		VIDEO	DIFFICULTY	RECENT ACCURACY
136: Exam Practice: Basic substitution with positive integers (limited to addition, subtraction, division and multiplication)	Example		1-4	
136a: Substitute positive integers into expressions with one variable (single operation).	Example	₿	1	
136b: Substitute positive integers into expressions with one variable (single operation plus constant).	Example	₿	1	
136c: Substitute positive integers into simple expressions with more than one variable.	Example		2	
136d: Substitute positive integers into a simple worded formula.	Example		2	
136e: Determine the value of a variable given an	E		2	

191 Multiplying single algebraic terms (no index laws)

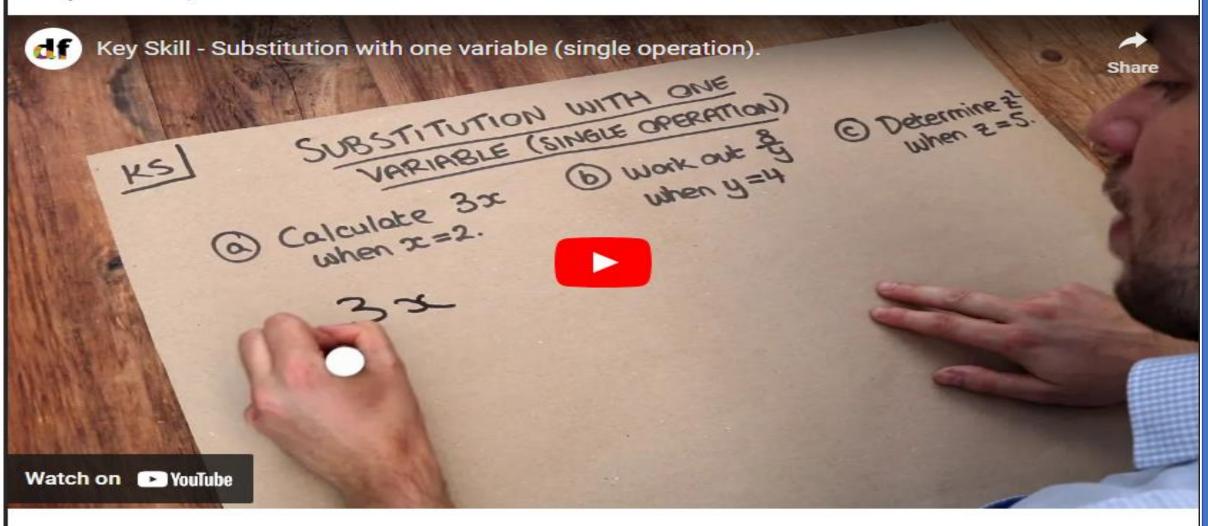
equation and the value of one variable within it.

Mastery: 0/100

Practise



136a: Substitute positive integers into expressions with one variable (single operation).





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St Andrew the Apostle Greek Orthodox School ightarrow Year 11 (Higher) ightarrow Unit 2 - Algebra ightarrow

2a Setting up, rearranging and solving equations

2a Setting up, rearranging and solving equations
12 skills

2b Sequences
6 skills

136 Basic substitution with positive integers (limited to addition, subtraction, division and multiplication)

Mastery: 0/100

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OR NARROW DOWN		VIDEO	DIFFICULTY	RECENT ACCURACY
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136c: Substitute positive integers into simple expressions with more than one variable.	Example		2	
136d: Substitute positive integers into a simple worded formula.	Example		2	
136e: Determine the value of a variable given an equation and the value of one variable within it.	Example		3	

191 Multiplying single algebraic terms (no index laws)

Mastery: 0/100

Practise



Year 11 Mock Exam Assessment Feedback (H tier Nov 2023) GCSE Mathematics Higher Tier

Paper 1	Question Title	Score			or Hose	
1	Expand and simplify an expression	1		2	K83d	
2a	Identify correlation	1	1/1	1	K135b	
2b	Draw a line of best fit	1	A	1	K135c	
2c	State why the line of fit may not be suitable for a given value	0	7	1	K135c	
					K101a, 106	
3	Word problem involving fractions, ratio and percentage	5	/	5	& 110a	
4a	Sketch the plan view of a prism	0	7	2	K249a	
4b	Sketch a prism	2	1	2		
5	Word problem involving pressure	3	7	3	K232a-c	
6a	Write a number given as an ordinary number in standard form	1	/	1	K212a	
6b	Write a number given in standard form as an ordinary number	1	/	1	K213a	
6c	Multiply rwo numbers given in standard form	1	/	2	K215a	
7	Word problem involving the perimeters and areas of a square	0	7	4	K69b &	
_	and a trapezium			_	K146a	
8a	Estimate an expression involving squares and roots	1	/	2	K123a & I	
8b	Decide if the estimation in part a is an underestimate or an overestimate	1	1	1		
9	Word problem involving percentage	0	7	3	K113b	
10a	Draw a box plot	2	1	3	K136a	
10b	Compare two box plots	1	1	2	E136	
11	Word problem involving division and subtraction	- 4	7	4	K198c & p	
12	Simplify an expression involving surds	3	1	3	K314a,b,e	
13	Problem involving the quadratic equation	1	1	1	K267a	
14	Word problem involving probability	1	1	3	K259c	
15	Change the subject of a formula	3	7	4	K186c,d,	
16	Problem involving ratio and equations	1	1	4		
17	Problem involving circle theorems	2	/	4	K306a-e	
18	Factorise an expression	1	/	2	K196a	
19	Simplify an expression given as a power	4	7	4	K207b	
20a	Sketch a sine graph	1	/	1	K284b	
20bi	Find a value from a cosine graph	0	/	1		
20bii	Problem involving vectors	0	/	1		
21	Complete the square for a quadratic (a≠1)	2	7	3	E312	
22a	Find the turning point of the quadratic in part a	3	7	3		
22b	Geometric reasoning involving a circle and a straight line	0	/	1	K271a & l	
23	Equation of a line meeting a circle	0	7	5	E328	

Name Sample Student

Class 13D

Paper 2	Question Title	s	cor	e	Dr Frost
1	Find the HCF of two numbers	0	/	3	K115c
2a	Simplify an expression involving indices	1	1	1	K206a
2b	Simplify an expression involving indices	2	1	2	K206d
3a	Word problem involving different currencies	4	1	4	K91a & b
3b	Explain how a change to the given conditions would affect the answer to part a	1	/	1	
4a	Translate a shape by a vector	2	7	2	K168a
4b	Describe a transformation	2	7	2	K235b
5	Describe what is wrong with a given frequency polygon	1	7	2	E138
6	Word problem involving rectangles, area, perimeter and percentages	3	/	3	K112a
7	Problem involving ratio and equations	0	/	2	K107a
8	Find the area of a circle given a triangle inscribed in the circle	1	1	4	K228a K114a
9a	Work out the gradient of a line	0	4	2	K189b
9b	Describe what the gradient in part a represents	1	7	1	
10a	Complete a cumulative frequency table	1	/	1	K257b
10b	Draw a cumulative frequency curve	2	7	2	K257b
10c	Estimate the median from a cumulative frequency curve	1	7	1	K257c
10d	Find a probability from a cumulative frequency curve	2	1	2	K257e
11	Word problem involving percentages	2	1	2	E210
12	Expand an expression involving three sets of brackets	2	7	3	K180b
13a	Identiify a graph	1	1	1	K281a
13b	Identiify a graph	0	1	1	K281a
13c	Identiify a graph	0	1	1	K281a
14	Prove that two triangles are congruent	0	/	3	E301
15a	Find the value of a function	1	/	1	K274a
15b	Find the inverse of a function	2	7	2	K277a
16	Word problem involving probability	3	7	3	K259c
17	Problem involving right angled triangles and trigonometry	0	7	2	K241b K184a
18	Find an expression for the nth term of a quadratic sequence	3	7	3	K199a
19	Question involving bounds	3	/	4	K216c,b K218d
20	Find the area of a segment of a circle	5	7	5	K241b K304a
21	Sine rule and Cosine rule	5	7	5	K302 K303
22	Problem involving similar shapes	1	7	5	K245a-e
23	Solve a quadratic inequality	1	7	4	K292a & b
	Total	53	/	80	

ent Feedback (I	n tier	NO	V 202	23)	IA	ame	Jample Student
er					С	lass	13D
	s	core	e	Dr Frost		Paper 2	Question Title
	1	1	2	K83d		1	Find the HCF of two numbers
	1	/	1	K135b		2a	Simplify an expression involving indices
	1	/	1	¥1354		2b	Simplify an expression involving indices
for a given value	0	/	1	K135c		3a	Word problem involving different curre
percentage	5	/	5	K101a, 106a & 110a		3b	Explain how a change to the given cond to part a
	0	/	2	K249a		4a	Translate a shape by a vector
	2	/	2			4b	Describe a transformation
	3	/	3	K232a-c		5	Describe what is wrong with a given fre
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m	1	1	2	K215a		8	Find the area of a circle given a triangle
areas of a square	0	,	,	K69b &		0	Mark and the avadient of a line
	0	/	4	K146a		9a	Work out the gradient of a line
nd roots	1	1	2	K123a & b		9b	Describe what the gradient in part a rep
restimate or an	1	/	1			10a	Complete a cumulative frequency table



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8b	Decide if the estimation in part a is an underestimate or an overestimate	1	1	1		
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20a	Sketch a sine graph	1	/	1	K284b	
20bi	Find a value from a cosine graph	0	/	1		
20bii	Problem involving vectors	0	/	1		
21	Complete the square for a quadratic (a≠1)	2	7	3	E312	
22a	Find the turning point of the quadratic in part a	3	7	3		
22b	Geometric reasoning involving a circle and a straight line	0	/	1	K271a & l	
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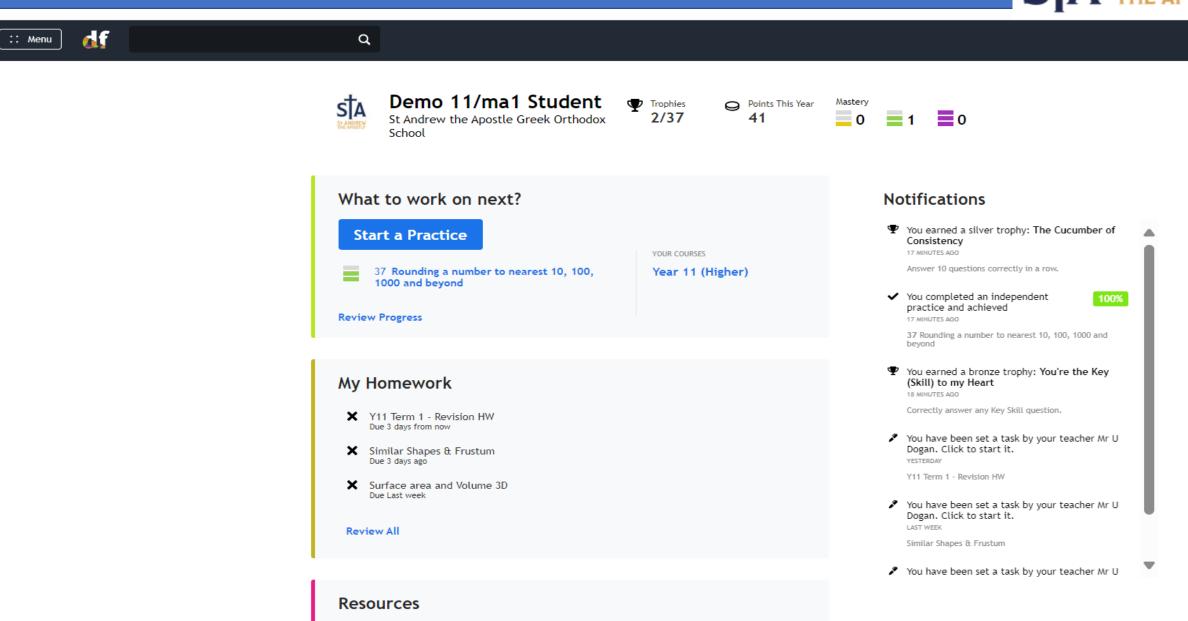
Name Sample Student

Class 13D

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2b	Simplify an expression involving indices	2	1	2	K206d
3a	Word problem involving different currencies	4	1	4	K91a & b
3b	Explain how a change to the given conditions would affect the answer to part a	1	/	1	
4a	Translate a shape by a vector	2	7	2	K168a
4b	Describe a transformation	2	7	2	K235b
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23	Solve a quadratic inequality	1	7	4	K292a & b
	Total	53	/	80	

Questions & Past Papers















Demo 11/ma1 Student

St Andrew the Apostle Greek Orthodox School



YOU

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What to work on next?

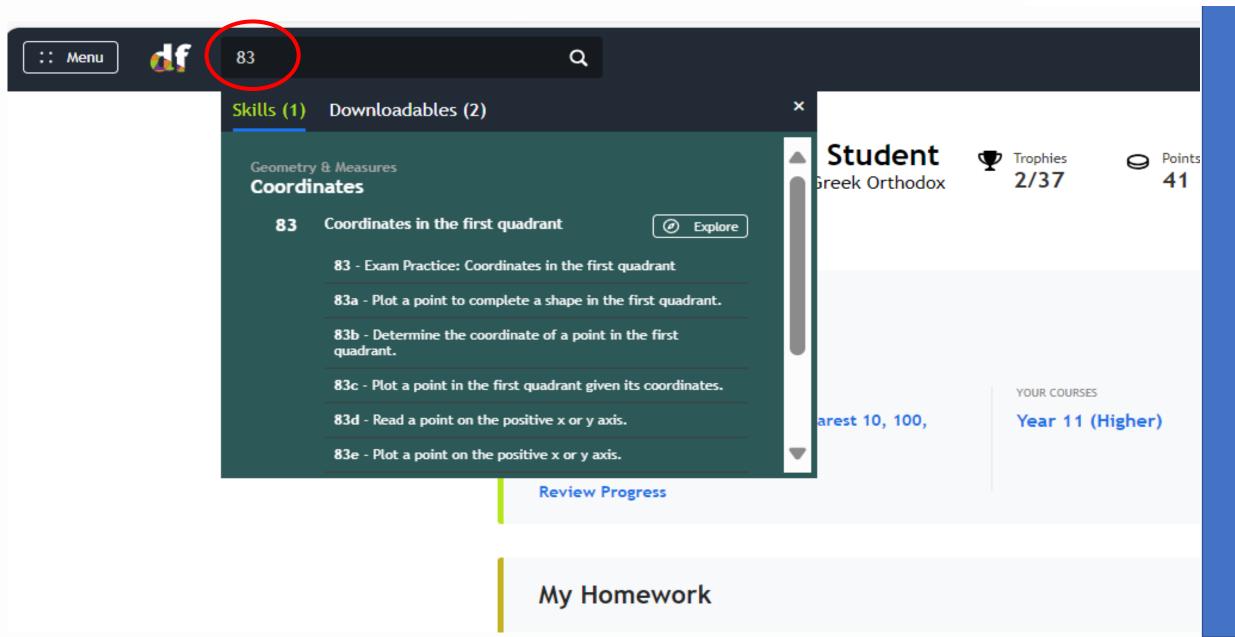
Start a Practice



37 Rounding a number to nearest 10, 100, 1000 and beyond

Review Progress







Coordinates

83 Coordinates in the first quadrant

Mastery: 0/100

	VIDEO	DIFFICULTY	RECENT ACCURACY
Example		1-4	
Example		1	
Example		3	
Example		4	
	Example Example Example Example Example Example Example	Example	Example

How you can support your child



- A quiet space to work and a regular routine for completing homework are highly recommended.
- Access to a <u>scientific calculator</u> is essential to make sure students get used to using their own.
- Regular revision and practice of key skills will help to achieve better confidence and recall in exams.
- Avoid distractions such as phones while studying. Take it away!





