AQA
Realising potential

LEVEL 2 CERTIFICATE IN FURTHER MATHEMATICS

(8365)

Specification
For teaching from September 2018 onwards
For exams in May/June 2020 onwards

Version 1.0 March 2018

Contents

1 Introduction

1.1 Why choose AQA Level 2 Certificate in Further Mathematics

This qualification fills the gap for high achieving students by assessing their higher order mathematical skills, particularly in algebraic reasoning, in greater depth, thus preparing them fully to maximise their potential in further studies at Level 3. It offers the opportunity for stretch and challenge that builds on the Key Stage 4 curriculum and is intended as an additional qualification to the GCSE Mathematics, rather than as a replacement. The content assumes prior knowledge of the Key Stage 4 Programme of Study and covers the areas of algebra and geometry, which are crucial to further study in the subject, in greater depth and breadth. This qualification places an emphasis on higher order technical proficiency, rigorous argument and problem solving skills.

It also gives an introduction to calculus and matrices and develops further skills in trigonometry, functions and graphs.

The AQA Level 2 Certificate in Further Mathematics is an untiered Level 2 linear qualification for learners who:

- either already have, or are expected to achieve, grades 7, 8 and 9 in GCSE mathematics
- are likely to progress to A-Level study in Mathematics and possibly Further Mathematics.

You can find out about all our Mathematics qualifications at aqa.org.uk/maths

1.2 Support and resources to help you teach

We know that support and resources are vital for your teaching and that you have limited time to find or develop good quality materials. So we've worked with experienced teachers to provide you with a range of resources that will help you confidently plan, teach and prepare for exams.

Teaching resources

Our resources include:

- teaching guidance to outline clearly the possible scope of teaching and learning
- worksheets for specific topics
- textbook approved by AQA.

Preparing for exams

Visit aqa.org.uk/8365 for everything you need to prepare for our exams, including:

- past papers, mark schemes and examiners' reports from the legacy specification 8360
- specimen papers and mark schemes for new courses

Analyse your students' results with Enhanced Results Analysis (ERA)

Find out which questions were the most challenging, how the results compare to previous years and where your students need to improve. ERA, our free online results analysis tool, will help you see where to focus your teaching. Register at aqa.org.uk/era

For information about results, including maintaining standards over time, grade boundaries and our post-results services, visit aqa.org.uk/results

Keep your skills up to date with professional development

Wherever you are in your career, there's always something new to learn. As well as subject-specific training, we offer a range of courses to help boost your skills:

- improve your teaching skills in areas including differentiation, teaching literacy and meeting Ofsted requirements
- help you prepare for a new role with our leadership and management courses.

You can attend a course at venues around the country, in your school or online – whatever suits your needs and availability. Find out more at coursesandevents.aqa.org.uk.

2 Specification at a glance

Subject content

1 Number

2 Algebra

3 Coordinate Geometry (2 dimensions only)

4 Calculus

5 Matrix Transformations

6 Geometry

Assessments

AQA Level 2 Certificate in Further Mathematics is linear. Students take two question papers. Both question papers must be taken in the same series.

Paper 1: non- calculator		Paper 2: calculator
What's assessed Content from any part of the specification may be assessed	✚	What's assessed Content from any part of the specification may be assessed
How it's assessed • written exam: 1 hour 45 minutes • 80 marks • Non-calculator • 50% of the AQA Level 2 Certificate in Further Mathematics assessment		How it's assessed • written exam: 1 hour 45 minutes • 80 marks • Calculator • 50% of the AQA Level 2 Certificate in Further Mathematics assessment
Questions A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.		Questions A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.

3 Subject content

This qualification is designed to be taught:

- either in parallel with GCSE Mathematics
- after GCSE Mathematics

The specification content is set out in six distinct topic areas although questions will be asked that range across these topics.

1 Number
2 Algebra
3 Coordinate Geometry (2 dimensions only)
4 Calculus
5 Matrix Transformations
6 Geometry

Within each topic area, the prescribed content is given in the left hand column. The right hand column gives clarification, where relevant, for the topic and provides guidance notes and some examples to clarify the scope of the prescribed content. This content section should be read in conjunction with the accompanying Teacher Guidance document and specimen papers for the specification.

1. Number

Ref	Content	Notes
1.1		Knowledge and use of numbers and the number system including fractions, decimals, percentages, ratio, proportion and order of operations are expected
1.2	The product rule for counting	Work out how many 5-digit odd numbers can be formed using the digits 1 3 4 6 8 with no repetition of any digit
1.3	Manipulation of surds, including rationalising the denominator	The use of surds in exact calculations Write $\sqrt{200} - \sqrt{72} + 3\sqrt{162}$ in the form of $a\sqrt{2}$ Rationalise and simplify $\frac{3\sqrt{2}+4}{5\sqrt{2}-7}$ Write your answer in the form $a + b\sqrt{3}$, where a and b are integers

2. Algebra

Ref	Content	Notes
2.1	The basic processes of algebra	Knowledge and use of basic skills in manipulative algebra including use of the associative, commutative and distributive laws, are expected
2.2	Definition of a function	Notation f (x) will be used, e.g. f $(x) = x^2 - 9$
2.3	Domain and range of a function	Domain may be expressed as, for example, $x > 2$, or 'for all x, except $x = 0$' and range may be expressed as f $(x) > -1$
2.4	Composite functions	The result of two or more functions, say f and g, acting in succession. fg (x) is g followed by f
2.5	Inverse functions	The inverse function of f is written f^{-1} Domains will be chosen for f to make f one-one
2.6	Expanding brackets and collecting like terms	Expand and simplify $(y^2 - 2y + 3)(2y - 1) - 2(y^3 - 3y^2 + 4y - 2)$
2.7	Expand $(a + b)^n$ for positive integer n	Expand and simplify $(5x + 2)^3$ Use Pascal's triangle to work out the coefficient of x^3 in the expansion of $(3 + 2x)^5$
2.8	Factorising	Factorise fully $(2x + 3)^2 - (2x - 5)^2$ Factorise $15x^2 - 34xy - 16y^2$ Factorise fully $x^4 - 25x^2$
2.9	Manipulation of rational expressions: Use of $+ \; - \; \times \; \div$ for algebraic fractions with denominators being numeric, linear or quadratic	Simplify $\dfrac{5}{x+2} - \dfrac{3}{2x-1}$ Simplify $\dfrac{x^3 + 2x^2 + x}{x^2 + x}$ Simplify $\dfrac{5x^2 - 14x - 3}{4x^2 - 25} \div \dfrac{x - 3}{4x^2 + 10x}$
2.10	Use and manipulation of formulae and expressions	Rearrange $\dfrac{1}{f} = \dfrac{1}{u} + \dfrac{1}{v}$ to make v the subject

Ref	Content	Notes
2.11	Use of the factor theorem for rational values of the variable for polynomials	Factorise $x^3 - 2x^2 - 5x + 6$ Show that $2x - 3$ is a factor of $2x^3 - x^2 - 7x + 6$ Solve $x^3 + x^2 - 10x + 8 = 0$ Show that $x - 7$ is a factor of $x^5 - 7x^4 - x + 7$
2.12	Completing the square	Work out the values of a, b and c such that $2x^2 + 6x + 7 \equiv a(x + b)^2 + c$
2.13	Drawing and sketching of functions Interpretation of graphs	Graphs could be linear, quadratic, exponential and restricted to no more than 3 domains Exponential graphs will be of the form $y = ab^x$ and $y = ab^{-x}$, where a and b are rational numbers Sketch the graph of $y = x^2 - 5x + 6$ Label clearly any points of the intersection with the axes A function f (x) is defined as f (x) $= x^2$ $0 \leqslant x < 1$ $= 1$ $1 \leqslant x < 2$ $= 3 - x$ $2 \leqslant x < 3$ Draw the graph of f(x) on the grid below for values of x from 0 to 3 Given a sketch of $y = ab^{-x}$, and two points, work out the values of a and b
2.14	Solution of linear and quadratic equations	Solutions of quadratics to include solution by factorisation, by graph, by completing the square or by formula Problems will be set in a variety of contexts, which result in the solution of linear or quadratic equations
2.15	Algebraic and graphical solution of simultaneous equations in two unknowns, where the equations could both be linear or one linear and one second order	Solve $4x - 3y = 0$ and $6x + 15y = 13$ Solve $y = x + 2$ and $y^2 = 4x + 5$ Solve $y = x^2$ and $y - 5x = 6$ Solve $xy = 8$ and $x + y = 6$

Ref	Content	Notes
2.16	Algebraic solution of linear equations in three unknowns	Solve $2x - 5y + 4z = 22$ $x + y + 2z = 4$ $x - y - 6z = -4$
2.17	Solution of linear and quadratic inequalities	Solve $5(x - 7) > 2(x + 1)$ Solve $x^2 < 9$ Solve $2x^2 + 5x \leqslant 3$
2.18	Index laws, including fractional and negative indices and the solution of equations	Express as a single power of x $\sqrt{x^{\frac{1}{2}} \times x^{\frac{7}{2}}}$ Express as a single power of x $\sqrt{\dfrac{x^{\frac{3}{2}} \times x^{\frac{7}{2}}}{x^2}}$ Solve $x^{-\frac{1}{2}} = 3$ Solve $\sqrt{x} - \dfrac{10}{\sqrt{x}} = 3 \qquad x > 0$
2.19	Algebraic proof	Prove $(n + 5)^2 - (n + 3)^2$ is divisible by 4 for any integer value of n
2.20	Using nth terms of sequences Limiting value of a sequence as $n \to \infty$	Work out the difference between the 16th and 6th terms of the sequence with nth term $\dfrac{2n}{n+4}$ Write down the limiting value of $\dfrac{2n}{n+4}$ as $n \to \infty$
2.21	nth terms of linear sequences	A linear sequence starts 180 176 172 … By using the nth term, work out which term has value –1000 Work out the nth term of the linear sequence $r + s \quad r + 3s \quad r + 5s \ \ldots$
2.22	nth terms of quadratic sequences	Work out the nth term of the quadratic sequence 10 16 18 16 … Which term has the value 0?

3. Coordinate Geometry (2 dimensions only)

Ref	Content	Notes
The straight line		
3.1	Know and use the definition of a gradient	
3.2	Know the relationship between the gradients of parallel and perpendicular lines	Show that *A* (0, 2), *B* (4, 6) and *C* (10, 0) form a right-angled triangle
3.3	Use Pythagoras' theorem to calculate the distance between two points	
3.4	Use ratio to find the coordinates of a point on a line given the coordinates of two other points.	Including midpoint
3.5	The equation of a straight line $y = mx + c$ and $y - y_1 = m(x - x_1)$ and other forms	Including interpretation of the gradient and y-intercept from the equation
3.6	Draw a straight line from given information	
The coordinate geometry of circles		
3.7	Understand that $x^2 + y^2 = r^2$ is the equation of a circle with centre (0, 0) and radius r	Including writing down the equation of a circle given centre (0, 0) and radius The application of circle geometry facts where appropriate: the angle in a semi-circle is 90°; the perpendicular from the centre to a chord bisects the chord; the angle between tangent and radius is 90°; tangents from an external point are equal in length.
3.8	Understand that $(x - a)^2 + (y - b)^2 = r^2$ is the equation of a circle with centre (a, b) and radius r	Including writing down the equation of any circle given centre and radius
3.9	The equation of a tangent at a point on a circle	

4. Calculus

Ref	Content	Notes
Differentiation		
4.1	Know that the gradient function $\frac{dy}{dx}$ gives the gradient of the curve and measures the rate of change of y with respect to x	
4.2	Know that the gradient of a function is the gradient of the tangent at that point.	
4.3	Differentiation of kx^n where n is an integer, and the sum of such functions	Including expressions which need to be simplified first Given $y = (3x + 2)(x - 3)$ work out $\frac{dy}{dx}$ Given $y = \frac{5}{x^3}$ work out $\frac{dy}{dx}$
4.4	The equation of a tangent and normal at any point on a curve	
4.5	Increasing and decreasing functions	When the gradient is positive/negative a function is described as an increasing/decreasing function
4.6	Understand and use the notation $\frac{d^2y}{dx^2}$	Know that $\frac{d^2y}{dx^2}$ measures the rate of change of the gradient function
4.7	Use of differentiation to find maxima and minima points on a curve	Determine the nature either by using increasing and decreasing functions or $\frac{d^2y}{dx^2}$
4.8	Using calculus to find maxima and minima in simple problems	$V = 49x + \frac{81}{x}$ $x > 0$ Use calculus to show that V has a minimum value and work out the minimum value of V
4.9	Sketch/ interpret a curve with known maximum and minimum points	

5. Matrix transformations

Ref	Content	Notes
		All calculations will be restricted to 2 × 2 or 2 × 1 matrices
5.1	Multiplication of matrices	Multiplying a 2 × 2 matrix by a 2 × 2 matrix or by a 2 × 1 matrix Multiplication by a scalar
5.2	The identity matrix **I**	2 × 2 only
5.3	Transformations of the unit square in the x – y plane	Representation by a 2 × 2 matrix Transformations restricted to rotations of 90^{o}, 180^{o} or 270^{o} about the origin, reflections in the lines $x = 0$, $y = 0$, $y = x$, $y = -x$ and enlargements centred on the origin
5.4	Combination of transformations	Using matrix multiplications Use of **i** and **j** notation is not required

6. Geometry

Ref	Content	Notes
6.1		Knowledge of perimeter and area of rectangles and circles; and of the area of triangles, parallelograms and trapezia; and of the surface area and volume of prisms, cylinders, spheres, cones and pyramids Knowledge of angle properties of parallel and intersecting lines, triangles, all special types of quadrilaterals and polygons Understand and use circle theorems: Angle at the centre is twice the angle at the circumference; angles in the same segment are equal; opposite angles in cyclic quadrilateral add up to 180°; alternate segment theorem; the theorems listed in the notes of section 3.7
Geometric proof		
6.2	Understand and construct geometrical proofs using formal arguments	The use of theorems listed in the notes of 3.7 and 6.1
Trigonometry in triangles		
6.3	Sine and cosine rules in scalene triangles; area of a triangle $= \frac{1}{2}ab\sin C$	Knowledge and use of trigonometry to solve right-angled triangles is expected
Pythagoras' theorem		
6.4	Use of Pythagoras' theorem in 2D and 3D	Recognise Pythagorean triples; 3, 4, 5; 5,12,13; 8,15,17; 7, 24, 25 and simple multiples of these
6.5	Be able to apply trigonometry and Pythagoras' theorem to 2 and 3 dimensional problems	Including the angle between a line and a plane and the angle between two planes; including triangles that do not have right angles
Ratios of angles and their graphs		
6.6	Sketch and use graphs of $y = \sin x$, $y = \cos x$ and $y = \tan x$ for angles of any size	
6.7	Be able to use the definitions $\sin\theta$, $\cos\theta$ and $\tan\theta$, for any positive angle up to 360°(measured in degrees only)	Angles measured anticlockwise will be taken as positive
6.8	Knowledge and use of 30°, 60°, 90° triangles and 45°, 45°, 90° triangles	The use of the ratios $1 : \sqrt{3} : 2$ and $1 : 1 : \sqrt{2}$

Ref	Content	Notes
6.9	Know and use $\tan\theta = \frac{\sin\theta}{\cos\theta}$ and $\sin^2\theta + \cos^2\theta = 1$	Including expressions to be simplified, proofs of identities and equations solved
6.10	Solution of simple trigonometric equations in given intervals	Equations will be restricted to single angles: $\sin x = 0.5$; $\sqrt{2}\sin x = \cos x$ for $0^o \leqslant x \leqslant 360^o$; $\sin^2 x = \frac{1}{4}$ for $0^o \leqslant x \leqslant 360^o$

4 Scheme of assessment

Find past papers and mark schemes, and specimen papers for new courses, on our website at aqa.org.uk/pastpapers

This specification is designed to be taken over two years with all assessments taken at the end of the course.

AQA level 2 certificate in Further Maths exams and certification for this specification are available for the first time in May/June 2020 and then every May/June for the life of the specification.

This is a linear qualification. In order to achieve the award, students must complete all exams in May/June in a single year.

All materials are available in English only.

4.1 Aims and learning outcomes

Courses based on this specification should encourage learners to be inspired and challenged by following a rigorous and satisfying course of study which emphasises the power of mathematics.

Learners should be encouraged to reason logically and recognise incorrect reasoning, and to appreciate the power of generalisation and mathematical proof.

They should be encouraged to see algebra as a natural tool for communicating mathematically and for solving a range of problems. They should begin to appreciate how situations can be represented by mathematical models and to consider the assumptions made and limitations of mathematical models. They should see mathematics as a coherent subject and understand how different areas of the subject link together. They should be encouraged to appreciate the elegance and beauty of mathematics for its own sake as well as beginning to realise its fundamental importance in understanding and shaping our world.

Courses based on this specification must enable candidates to:

1. develop knowledge, skills and understanding of higher order mathematical methods and concepts
2. acquire and use problem solving strategies including the use of algebra as a tool for solving problems
3. select, apply and link mathematical techniques and methods to solve challenging and non-routine problems
4. reason mathematically, make deductions and inferences and draw conclusions
5. interpret and communicate mathematical information in a variety of forms appropriate to the information and context including rigorous use of algebraic argument and formal proof.

4.2 Assessment objectives (AOs)

The examination papers will assess the following assessment objectives in the context of the content and skills set out in Section 3 (Subject Content).

- AO1: Recall and use knowledge of the prescribed content for routine and multi-step procedures
- AO2: Apply mathematical reasoning, skills and knowledge to solve mathematical problems including rigorous justification and formal proof.

Assessment Objectives (AOs)	Component weightings (approximate %)		Overall weighting of AOs (approximate %)
	Paper 1	Paper 2	
AO1	28 – 32	28 – 32	56 – 64
AO2	18 – 22	18 – 22	36 – 44
Overall weighting of components	50	50	100

4.3 Assessment weightings

The marks awarded on the papers will be scaled to meet the weighting of the components. Students' final marks will be calculated by adding together the scaled marks for each component. Grade boundaries will be set using this total scaled mark. The scaling and total scaled marks are shown in the table below.

Component	Maximum raw mark	Scaling factor	Maximum scaled mark
Paper 1	80	×1	80
Paper 2	80	×1	80
		Total scaled mark:	160

5 General administration

You can find information about all aspects of administration, as well as all the forms you need, at aqa.org.uk/examsadmin

5.1 Entries and codes

You only need to make one entry for each qualification – this will cover all the question papers and certification.

Every specification is given a national discount (classification) code by the Department for Education (DfE), which indicates its subject area.

If a student takes two specifications with the same discount code, Further and Higher Education providers are likely to take the view that they have only achieved one of the two qualifications. Please check this before your students start their course. Where two specifications have the same discount code, only one of them will be counted for the purpose of the School and College Performance tables – the DfE's rules on 'early entry' will determine which one.

Qualification title	AQA entry code	DfE discount code
AQA Level 2 Certificate in Further Mathematics	8132	TBC

This specification complies with Ofqual's:

- *General Conditions of Recognition* that apply to all regulated qualifications
- GCSE qualification conditions that apply to all GCSEs
- GCSE Mathematics conditions that apply to all GCSEs in this subject.

The Ofqual qualification accreditation number (QAN) is 603/3104/5.

5.2 Overlaps with other qualifications

There is some overlap between this specification and AQA's GCSE Maths.

5.3 Awarding grades and reporting results

The AQA Level 2 Certificate in Further Mathematics qualification will be graded on a grade scale of 5 to 9. A student who fails to achieve grade 5 will be awarded an allowed grade 4. Students who fail to reach the minimum standard for the allowed grade 4 will be recorded as 'U' (unclassified) and will not receive a qualification certificate.

We will publish the minimum raw mark for each grade, for each paper and for the overall qualification, when we issue candidates' results. We will report a candidate's results to your centre in terms of overall grade and marks for each paper. A candidate's grade is determined solely by their overall mark. There is no requirement to achieve the grade boundary in each paper in order to achieve a particular grade overall. Hence, a strong performance in one paper can compensate for a weaker performance in the other.

Candidates' grades are based on the work they submit for assessment.

5.4 Re-sits and shelf life

Students can re-sit the qualification as many times as they wish, within the shelf life of the qualification.

5.5 Access to assessment: diversity and inclusion

General qualifications are designed to prepare students for a wide range of occupations and further study. Therefore our qualifications must assess a wide range of competences.

The subject criteria have been assessed to see if any of the skills or knowledge required present any possible difficulty to any students, whatever their ethnic background, religion, sex, age, disability or sexuality. If any difficulties were encountered, the criteria were reviewed again to make sure that tests of specific competences were only included if they were important to the subject.

As members of the Joint Council for Qualifications (JCQ) we participate in the production of the JCQ document *Access Arrangements and Reasonable Adjustments: General and Vocational qualifications*. We follow these guidelines when assessing the needs of individual students who may require an access arrangement or reasonable adjustment. This document is published on the JCQ website at jcq.org.uk

Students with disabilities and special needs

We can make arrangements for disabled students and students with special needs to help them access the assessments, as long as the competences being tested are not changed. Access arrangements must be agreed **before** the assessment. For example, a Braille paper would be a reasonable adjustment for a Braille reader but not for a student who does not read Braille.

We are required by the Equality Act 2010 to make reasonable adjustments to remove or lessen any disadvantage that affects a disabled student.

If you have students who need access arrangements or reasonable adjustments, you can apply using the Access arrangements online service at aqa.org.uk/eaqa

Special consideration

We can give special consideration to students who have been disadvantaged at the time of the exam through no fault of their own – for example a temporary illness, injury or serious problem such as the death of a relative. We can only do this **after** the exam.

Your exams officer should apply online for special consideration at aqa.org.uk/eaqa

For more information and advice about access arrangements, reasonable adjustments and special consideration please see aqa.org.uk/access or email accessarrangementsqueries@aqa.org.uk

5.6 Working with AQA for the first time

If your school or college has not previously offered any AQA specification, you need to register as an AQA centre to offer our exams to your students. Find out how at aqa.org.uk/becomeacentre

If your school or college is new to this specification, please let us know by completing an Intention to enter form. The easiest way to do this is via e-AQA at aqa.org.uk/eaqa

5.7 Private candidates

A private candidate is someone who enters for exams through an AQA-approved school or college but is not enrolled as a student there.

If you are a private candidate you may be self-taught, home-schooled or have private tuition, either with a tutor or through a distance learning organisation. You must be based in the UK.

If you have any queries as a private candidate, you can:

- speak to the exams officer at the school or college where you intend to take your exams
- visit our website at aqa.org.uk/examsadmin
- email: privatecandidates@aqa.org.uk

6 Appendix: mathematical formulae

1. Students are expected to know the following formulae included in the subject content; they will **not** be given in the exam.

The quadratic formula

The solutions of $ax^2 + bx + c = 0$, where $a \neq 0$

$$x = \frac{-b \pm \sqrt{(b^2 - 4ac)}}{2a}$$

Perimeter, area, surface area and volume formulae

Area of a trapezium = $\frac{1}{2}(a+b)h$ where a and b are the lengths of the parallel sides and h is the perpendicular distance between them

Circumference of a circle $= 2\pi r = \pi d$

Area of a circle $= \pi r^2$ where r is the radius and d is the diameter

Volume of a prism = area of cross section × length

Curved surface area of a cylinder = $2\pi rh$

Volume of a cylinder = $\pi r^2 h$ where r is the radius of the base and h the height

Pythagoras' theorem

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

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

Trigonometry formulae

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

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

In **any** triangle ABC where a, b and c are lengths of the sides:

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 $= \frac{1}{2}ab\sin C$

For any angle, θ: $\tan\theta = \frac{\sin\theta}{\cos\theta}$ and $\sin^2\theta + \cos^2\theta = 1$

2. Students are **not** expected to memorise the following formulae; they will be given in the exam in the relevant question.

Perimeter, area, surface area and volume formulae

Curved surface area of a cone $= \pi rl$

Surface area of a sphere $= 4\pi r^2$

Volume of a sphere $= \frac{4}{3}\pi r^3$

Volume of a cone or pyramid $= \frac{1}{3} \times$ area of base $\times h$

where r is the radius of a sphere or the base of a cone, l is the slant height of a cone and h is the perpendicular height of a cone or pyramid.

Get help and support

Visit our website for information, guidance, support and resources at aqa.org.uk/8365

You can talk directly to the Maths subject team

E: maths@aqa.org.uk

T: 0161 957 3852

aqa.org.uk

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