

Maths GCSE Revision



GCSE - Mathematics

- Exam board [AQA](#)
- Foundation Grades 1 – 5
- Higher Grades (3) 4 – 9
- 3 papers each 1 hour 30mins
- Paper 1 no calculator
- Papers 2 & 3 calculator allowed
- For the mocks, students will only sit one non-calculator and one calculator paper.



Home / Subjects / Maths / GCSE

GCSE Mathematics

Specifications

A screenshot of the AQA website showing the GCSE Mathematics (8300) specification page. On the left, there is a small image of the specification book cover, which features a colorful, abstract floral or starburst design. To the right of the image, the text reads: 'GCSE Mathematics (8300)', 'Teaching from September 2015', and 'Exams from June 2017'.

GCSE Mathematics (8300)

Teaching from September 2015
Exams from June 2017



Exam Paper Content - any topic could be in any paper

Q1.

Circle the decimal that is closest in value to $\frac{39}{800}$

0.04

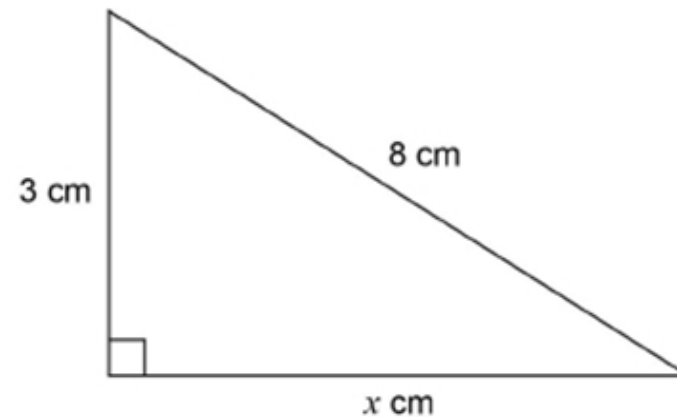
0.048

0.049

0.05

(Total 1 mark)

Q2.



Not drawn
accurately

Work out the value of x as a decimal.

(Total 3 marks)



Exam Paper Content - any topic could be in any paper

Q3.

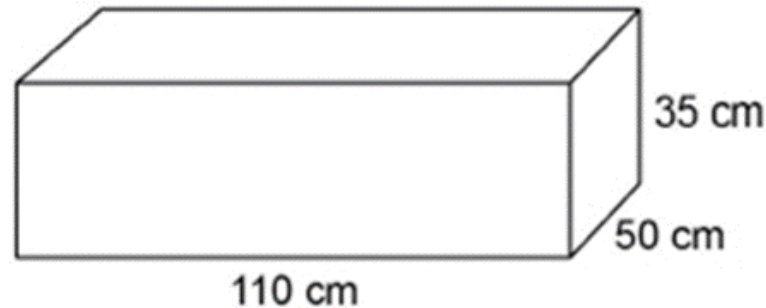
Eva thinks she can save water by having a shower instead of a bath.

Eva's shower

uses 10.8 litres per minute

lasts for 8 minutes.

Eva assumes that the water in her bath is in the shape of this cuboid.



$1000 \text{ cm}^3 = 1 \text{ litre}$

- (a) Using Eva's assumption, work out how many litres of water she saves by having a shower instead of a bath.

(5)



Revision

Maths is a doing subject – so students need to practice questions

Students will need to remember basic formulae, for example area of shapes, density, speed, quadratic formula (higher tier only), trigonometry ratios and rules – revision cards will help with these



Skills Audit Sheets should be found in students exercise book from Year 10 and Year 11 to help identify topics that need further practice.

Name	1	2	3a	3b	4	5a	5b	6a	6b	7a	7b	7c	8a	8b	9	10	TOT
	4	3	3	4	1	3	1	1	2	2	3	3	3	3	4	4	44
	4	3	3	3	0	3	1	1	1	2	3	0	3	3	4	3	37
	4	0	3	4	1	3	0	1	1	2	2	0	3	3	4	1	32
	2	0	3	4	0	2	0	1	0	2	3	3	3	3	4	2	32
	4	3	3	4	1	3	0	1	1	2	3	1	3	3	0	0	32
	4	1	3	0	0	3	1	1	2	2	3	0	3	3	2	1	29
	2	0	3	4	0	3	1	1	1	2	0	2	1	1	2	2	25
	1	0	3	3	0	3	1	1	1	2	2	0	3	3	1	0	24
	0	3	3	2	0	2	0	1	1	2	3	0	3	0	4	0	24
	0	3	3	4	0	0	0	1	0	2	3	0	3	3	0	0	22
	1	0	0	2	0	0	0	1	0	2	3	2	1	3	4	0	19
	1	0	3	0	0	0	0	1	1	0	3	0	3	3	4	0	19
	0	1	0	2	0	0	0	1	0	2	3	0	3	3	4	0	19
Average Score	1.9	1.2	2.5	2.7	0.2	1.8	0.3	1.0	0.8	1.8	2.6	0.7	2.7	2.6	2.8	0.8	26.16667
Average Percent	48	39	83	67	17	61	33	100	38	92	86	22	89	86	69	19	59.4697
Skill	Fract to Dec	Forming and solving an equation	Ratio of ingredients	Percentage increase	Sum of numbers problem	Working with fractions	Working with fractions	Inequalities on a number line	Inequalities on a number line	Reading from a 2-way table	Converting a fraction to a %	Relative frequency	Solving Equations with a bracket	Solving Equations with unknown on both sides	Draw a pie chart	Coordinate problem	



Resources





[Kerboodle Maths](#) website – all students have their own unique login and can access the digital textbook.

My Home My Courses **kerboodle** Ben Robinson Notifications 1 Help Log out

AQA GCSE MATHS
ONLINE RESOURCES

HOME DIGITAL BOOK ASSESSMENT MARKBOOK INVISIPEN USER MANAGEMENT

DIGITAL BOOK



Navigation arrows: < >

● ○

Book Title	Availability	Teacher	Student
AQA GCSE Maths Foundation Homework Book	Availability	Teacher	Student
AQA GCSE Maths Foundation Student Book	Availability	Teacher	Student
AQA GCSE Maths Foundation Teacher Companion	Availability	Teacher	



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3 Angles and polygons

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Summary

Checkout

You should now be able to...

✓ Describe and apply the properties of angles at a point, on a line and at intersecting and parallel lines.	1, 2
✓ Derive and use the sum of angles in a triangle.	3, 4
✓ Derive and apply the properties and definitions of special types of quadrilaterals.	5 – 7
✓ Solve geometrical problems on coordinate axes.	8
✓ Identify and use congruence and similarity.	9, 10
✓ Deduce and use the angle sum in any polygon and derive properties of regular polygons.	11

Test it

Questions

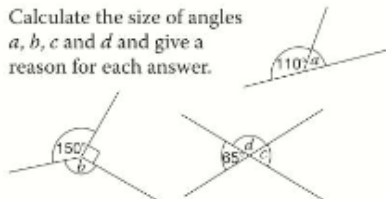
Language Meaning

Example

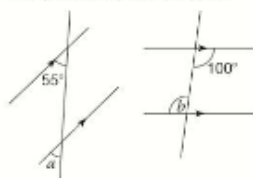
Acute angle	An angle smaller than a right angle	
Right angle	90° or one-quarter turn.	
Obtuse angle	Greater than 90° but smaller than 180°.	
Reflex angle	Greater than 180° but smaller than 360°.	
Alternate angles	When referring to parallel lines: angles in the corners of a Z shape.	Alternate angles
Corresponding angles	When referring to parallel lines: angles under the arms of an F shape.	Corresponding angles
Three-figure bearing	A direction defined by a three-figure angle measured clockwise from north.	East is 090°. South-west is 225°.
Polygon	A 2D shape with straight edges.	Pentagon (5), Hexagon (6), Octagon (8), Decagon (10).
Regular	All sides are equal and all angles are equal.	A regular quadrilateral is a square.
Triangle	A three sided polygon.	Right-angled, equilateral, isosceles, scalene.
Quadrilateral	A four sided polygon.	Square, rectangle, rhombus, trapezium, parallelogram, kite.
Congruent	Exactly the same shape and size.	<p>A and B are similar; the scale factor is 2. A and C are congruent.</p>
Similar	The same shape but different in size.	
Scale Factor	The ratio of corresponding lengths in two similar shapes.	
Interior angle	The angle between two sides inside a polygon.	Interior angle
Exterior angle	The angle between one side of a polygon and the next side extended.	Exterior angle

Review

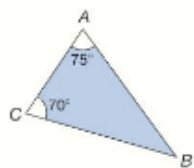
- 1 Calculate the size of angles a , b , c and d and give a reason for each answer.



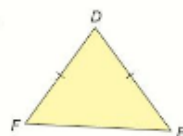
- 2 Calculate the size of angles a and b and give a reason for each answer.



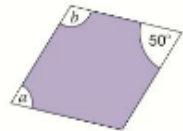
- 3 Calculate the size of angle ABC in this triangle.



- 4 The triangle DEF is not drawn accurately. Which side is the same length as side DE ?



- 5 Use your knowledge about triangles to prove that the angles in a quadrilateral add up to 360°.



What next?

Score	0 – 4	Your knowledge of this topic is still developing. To improve look at MyMaths: 1082, 1086, 1100, 1102, 1109, 1119, 1130, 1320, 1141, 1148
	5 – 9	You are gaining a secure knowledge of this topic. To improve your fluency look at InvisiPens: 03Sa – k
	10 – 11	You have mastered these skills. Well done you are ready to progress! To develop your problem solving skills look at InvisiPens: 03Aa – g

- 7 Which quadrilateral is being described below?

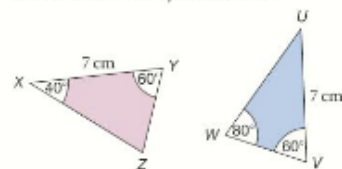
- Two pairs of parallel and equal sides.
- One pair of parallel sides and no equal sides.
- Two pairs of equal sides but no parallel sides.

- 8 Draw coordinate axes with x and y from 0 to 6. Now plot these points $A(3, 5)$, $B(6, 2)$ and $C(1, 0)$.

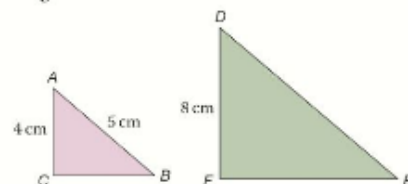
Join up the dots to form a triangle, what type of triangle is this?

- 9 Are these two triangles congruent?

Give a reason for your answer.



- 10 These triangles are similar, what is the length of DE ?



- 11 What do the interior angles of a pentagon add up to?



[Mymaths.co.uk](https://www.mymaths.co.uk) website – all students have a login for this website

Username : taverham

Password : maths

The screenshot shows the Mymaths.co.uk website interface. At the top, there is a dark blue navigation bar with a logo on the left, links for "Log out", "Help", and "Teacher Dashboard", a search bar with the text "Search...", and a green "My portal login" button. Below the navigation bar, the main content area is divided into a left sidebar and a main content area. The sidebar, titled "Select Curriculum", contains a dropdown menu set to "GCSE 9-1 (England)" and several menu items: "Library", "Revision and assessment", "GCSE booster pack: grades 3 and 4", "GCSE booster pack: grades 4 and 5" (highlighted in green), "GCSE booster pack: grades 6 and 7", "GCSE booster pack: grades 8 and 9", "Activities", "Games", and "Tools". A red arrow points from the "Library" item to the "GCSE booster pack: grades 4 and 5" item. The main content area is titled "GCSE booster pack: grades 4 and 5" and features a list of topics under the "Calculations" category: "Factors, powers, roots", "Fractions, percentages", "Measures, estimation", "Algebra" (highlighted in green), "Formulae, functions", "Linear equations", "Quadratic equations", "Simultaneous equations", "Inequalities", "Sequences", "Linear graphs", and "Non-linear graphs". A red arrow points from the "Algebra" item to the "Assessment: Calculations worksheet (4 and 5)" item. This assessment item is highlighted in green and includes a "Worksheet" button. Below it, a list of other resources is shown, including "Revision: Calculations (4 and 5)", "Long multiplication", "Introducing long division", "Multiply two decimals", and "Dividing a decimal by a decimal". A speaker icon is visible in the bottom right corner of the page.



Select Curriculum

GCSE 9-1 (England) ▾

Library

Revision and assessment

GCSE booster pack: grades 3 and 4

GCSE booster pack: grades 4 and 5

GCSE booster pack: grades 6 and 7

GCSE booster pack: grades 8 and 9

Activities

Games

Tools

GCSE booster pack: grades 4 and 5

Sequences	G45	Assessment: Algebra worksheet (4 and 5)	
Linear graphs	G45	Revision: Algebra (4 and 5)	
Non-linear graphs	G45	Indices 2	fh
Ratio, proportion	G23	Simplifying 2	f
Angle properties	G45	Brackets Expanding and simplifying expressions such as $(3x+2)(2x+5)$.	fh
Constructions		Lesson	
Properties of shapes		Online homework	
Transformations	G45	Factorising quadratics 1	fh
Perimeter, area, volume			
Trigonometry, Pythagoras			
Vectors			
Probability			
Venn diagrams			



Additional Revision Resources

- [Corbett Maths](#) website (5-a-day)
- [Maths Genie](#) website
- [CGP Revision Guides](#)

