MathsBox

AQA & Edexcel

QUESTION GENERATOR OVERVIEW

Question generators for Entry Level Maths.

Every Entry Level outcome with a Mathsbox question generator, for both AQA and Edexcel, organised by unit or topic and level so you can find exactly what you need.

AQA · 8 units | Edexcel · 17 topics | Level 1 | Level 2 | Level 3

289
question generators

175
AQA

114
Edexcel

Contents

AQA

8 units · 175 generators

01	Properties of number	29 generators	3
02	The four operations	29 generators	3
03	Ratio	23 generators	3
04	Money	16 generators	4
05	Calendar and time	25 generators	4
06	Measures	20 generators	5
07	Shape and space	16 generators	5
08	Handling data	17 generators	5

Edexcel

17 topics · 114 generators

01	Counting and ordering	10 generators	6
02	Place value	10 generators	6
03	Fractions, decimals and money	16 generators	6
04	Patterns in number	11 generators	7
05	Addition and subtraction facts	5 generators	7
06	Calculations	7 generators	7
07	Choosing methods	3 generators	7
08	Algebra	3 generators	8
09	Ratio and proportion	1 generator	8
10	Properties of 2D shapes	7 generators	8
11	Properties of 3D shapes	5 generators	8
12	Perimeter and area	3 generators	9
13	Position and movement	6 generators	9
14	Angles	2 generators	9
15	Measures	6 generators	9
16	Reading scales and measures	4 generators	10
17	Handling information	15 generators	10

01 Properties of number

AQA ENTRY LEVEL · UNIT 1

3 levels
29 generators

Level 1

AQA 7

- 1.1 Count reliably up to 20 items
- 1.2 Read numbers up to 20 including zero
- 1.2 Write numbers up to 20 including zero
- 1.2 Order numbers up to 20, including zero
- 1.2 Compare numbers up to 20, including zero
- 1.3 Complete a number line up to 20 (increasing)
- 1.3 Complete a number line up to 20 (decreasing)

Level 2

AQA 9

- 2.1 Write numbers up to 100
- 2.1 Read numbers up to 100 including zero
- 2.1 Order numbers up to 100 including zero
- 2.1 Compare numbers up to 100, including zero
- 2.2 Recognise place value in two digit numbers ×2
- 2.3 Count from 0 in steps of two, three and five

Level 2 *continued*

- 2.4 Round numbers less than 100 to the nearest 10
- 2.5 Understand and identify odd and even numbers

Level 3

AQA 13

- 3.1 Read numbers up to 1,000
- 3.1 Write numbers up to 1,000
- 3.2 Order numbers up to 1,000
- 3.2 Compare numbers up to 1,000
- 3.3 Recognise place value in three digit numbers ×2
- 3.4 Round numbers less than 1,000 to the nearest 10
- 3.5 Round numbers less than 1,000 to the nearest 100
- 3.6 Find 10 more or less than a given number
- 3.6 Find 100 more or less than a given number
- 3.7 Recognise multiples of 2, 5 and 10
- 3.7 Recognise multiples 10, 50 and 100
- 3.7 Recognise and use multiples of 2, 3, 4, 5, 8, 10, 50 and 100

02 The four operations

AQA ENTRY LEVEL · UNIT 2

3 levels
29 generators

Level 1

AQA 6

- 1.1 Add two whole numbers with a total of up to 20 ×2
- 1.2 Subtract one number up to 20 from another ×2
- 1.3 Understand and use the + and - signs to solve simple number problems ×2

Level 2

AQA 8

- 2.1 Add whole numbers with a total up to 100 ×2
- 2.2 Subtract one number up to 100 from another ×2
- 2.3 Multiply using single digit whole numbers ×2
- 2.4 Use and interpret +, -, ×, ÷ and = in real-life situations for solving problems
- 2.5 Recall and use multiplication facts for the 2, 5 and 10 multiplication tables

Level 3

AQA 15

- 3.1 Add and subtract using three digit numbers ×4
- 3.2 Multiply a two digit whole number by a single digit whole number
- 3.3 Divide a two digit whole number by a single digit whole number
- 3.4 Use an interpret +, -, ×, ÷ and = in real-life situations for solving problems
- 3.5 Use inverse operations to find missing numbers ×4
- 3.6 Estimate the answer to a calculation ×2
- 3.7 Recall and use multiplication facts for the 3, 4 and 8 multiplication tables ×2

03 Ratio

AQA ENTRY LEVEL · UNIT 3

3 levels
23 generators

Level 1

AQA 6

- 1.1 Understand equality ×3
- 1.2 Identify or show one half of a quantity up to 20 ×2
- 1.3 Work out half of an even number up to 20

Level 2

AQA 8

- 2.1 Identify or show one third or one quarter of a quantity up to 24 ×2
- 2.2 Work out one third or one quarter of a quantity up to 24 ×2
- 2.3 Count in fractions of one half or one third or one quarter ×2

Level 2 *continued*

- 2.4 Work out amounts two, three or four times the size of a given amount
- 2.5 Recognise the equivalence of ½ and 2/4

Level 3

AQA 9

- 3.1 Identify or show unit fractions up to one tenth of a quantity up to 100
- 3.2 Work out unit fractions up to one tenth of a quantity up to 100
- 3.3 Identify or show any number of thirds, quarter, fifths or tenths of a quantity

Level 3 *continued*

- 3.4 Work out any number of thirds, quarters, fifths or tenths of an amount
- 3.5 Recognise and identify equivalent fractions ×2

Level 3 *continued*

- 3.6 Add and subtract fractions with the same denominator ×2
- 3.7 Work out amounts 5,8 or 10 times the size of a given amount

04 AQA ENTRY LEVEL · UNIT 4 Money

3 levels
16 generators

Level 1 AQA 3

- 1.1 Recognise coins and notes up to £20
- 1.2 Exchange money up to 20p for an equivalent amount in other denominations
- 1.3 Add up to 20 coins

Level 2 AQA 6

- 2.1 Appreciate the purchasing power of amounts of money (coins)
- 2.2 Convert from pence to pounds and vice versa ×2
- 2.3 Make amounts of money up to £2 from given coins
- 2.4 Make amounts of money in multiples of £5 from £5, £10 and £20 notes
- 2.5 Calculate with amounts of money in pence up to £1 and whole pounds up to £100 and give change

Level 3 AQA 7

- 3.1 Appreciate the purchasing power of amounts of money (notes)
- 3.2 Exchanged notes for an equivalent value in coins
- 3.3 Use decimal notation for money
- 3.4 Interpret a calculator display
- 3.5 Solve real life problems involving what to buy and how to pay
- 3.6 Add amounts of money and give change
- 3.7 Carry out investigations involving money

05 AQA ENTRY LEVEL · UNIT 5 Calendar and time

3 levels
25 generators

Level 1 AQA 4

- 1.1 Know the days of the week and their order
- 1.2 Read the time to the hour or half hour on an analogue clock
- 1.2 Draw the hands on a clock to show times
- 1.3 Order familiar events

Level 2 AQA 10

- 2.1 Know the seasons and months and their order
- 2.2 Know that 1 week = 7 days; 1 day = 24 hours; 1 hour= 60 minutes; 1 minute = 60 seconds
- 2.3 Read the time displayed on an analogue or 12 hour digital clock in half hours and quarter hours
- 2.3 Draw the hands on a clock or the digital display to show times ×2
- 2.4 Read the time to the nearest five minutes on an analogue clock
- 2.4 Draw the hands on the clock to show the time

Level 2 *continued*

- 2.4 Draw the hands on the clock to show the time given on a digital clock
- 2.5 Find the difference between two times given in hours, half hours and quarter hours ×2

Level 3 AQA 11

- 3.1 Solve problems involving time
- 3.2 Know that there are 365 days in a year, 366 days in a leap year, 12 months in a year and 52 full weeks in a year
- 3.3 Use a calendar and write the date (day/month/year)
- 3.4 Tell and write the time from an analogue clock, including using Roman numerals from I to XII
- 3.5 Understand and use the 12-hour and 24-hour clock system
- 3.5 Understand and use the 12-hour and 24-hour clock system and convert from one system to the other
- 3.6 Convert between hours, minutes and seconds ×4
- 3.7 Add up to three lengths of time given in minutes and hours

06 Measures

AQA ENTRY LEVEL · UNIT 6

3 levels
20 generators

Level 1

AQA 3

1.1 Compare lengths, heights, weights and capacities
1.2 Give the length of a line drawn on a centimetre grid
1.3 Describe capacity in fractions

Level 2

AQA 5

2.1 Choose appropriate standard units of length, capacity and weight
2.2 Compare and order lengths, capacities and weights in the same units
2.3 Select a possible length, capacity or weight for a given item
2.4 Measure or draw a length using a ruler
2.5 Estimate the weight, capacity or length of given items

Level 3

AQA 12

3.1 Add lengths, capacities and weights
3.2 Convert standard units of length, capacity and weight ×4
3.3 Compare and order lengths, capacities and weights in the different standard units ×2
3.4 Measure the perimeter of a simple shape
3.5 Choose an appropriate measuring instrument
3.6 Read values from an appropriate scale
3.7 Read and compare temperature with negative values ×2

07 Shape and space

AQA ENTRY LEVEL · UNIT 7

3 levels
16 generators

Level 1

AQA 3

1.1 Recognise and name squares, rectangles, triangles, circle and cubes
1.2 Compare and order a group of shapes of different sizes and recognise congruent shapes
1.3 Use and understand positional vocabulary

Level 2

AQA 5

2.1 Recognise and name shapes including pentagons, hexagons and octagons and identify a right-angles triangle from a set of triangles
2.2 Recognise and name cuboids, pyramids and spheres
2.3 Describe the properties of 2D shapes, including straight and curved edges

Level 2 *continued*

2.4 Describe the properties of solids
2.5 Understand angle as a measure of turn

Level 3

AQA 8

3.1 Recognise and name prisms, cylinder and cones
3.2 Draw lines of symmetry on shapes or pictures
3.3 Recognise and draw nets of cubes and cuboids
3.4 Identify whether an angle is less or more than a right angle
3.5 Identify horizontal, vertical and parallel lines
3.6 Denote the position of a point on a grid by its coordinates or identify a point or item given its coordinates ×2
3.7 Use North (N), East (E), South (S) and West (W) to give directions or position from a map

08 Handling data

AQA ENTRY LEVEL · UNIT 8

3 levels
17 generators

Level 1

AQA 3

1.1 Sort and classify objects using a single criteria
1.2 Interpret and draw conclusions from a list or group of objects
1.3 Construct and interpret simple line graphs

Level 2

AQA 6

2.1 Sort and classify objects using more than one criterion
2.2 Collect information by survey
2.3 Record results in lists, tally charts and tables
2.4 Construct pictograms where one picture represents one item
2.4 Interpret pictograms where one picture represents one item
2.5 Interpret simple tables

Level 3

AQA 8

3.1 Construct bar charts with the vertical axis scaled in ones or twos
3.2 Construct pictograms where one picture represents more than one item
3.3 Extract numerical information bar charts
3.3 Extract numerical information from pictograms
3.4 Complete a frequency table given the original list of results
3.5 Complete a tally chart and the resulting frequency table
3.6 Compare two or more diagrams
3.7 Solve one-step and two-step problems based on statistical information

01 EDEXCEL ENTRY LEVEL · TOPIC 1
Counting and ordering

3 levels
10 generators

Level 1 — EDEXCEL 2

1.1 Count up to 10, knowing the number names
1.2 Count small sets of objects, checking the total

Level 2 — EDEXCEL 4

1.3 Count up to 100, knowing the number names
1.4 Count collections of objects, checking the total
1.5 Recognise odd and even numbers
1.6 Count on in steps of different sizes

Level 3 — EDEXCEL 4

1.7 Count, read, write and order numbers up to 1000, knowing the number names
1.8 Describe and extend simple number sequences (including odd/even numbers)
1.9 Count on or back in tens or hundreds from any two-digit number (positive result only)
1.10 Count on or back in tens or hundreds from any two- or three-digit number (positive result only)

02 EDEXCEL ENTRY LEVEL · TOPIC 2
Place value

3 levels
10 generators

Level 1 — EDEXCEL 3

2.1 Read numbers to 10
2.1 Write numbers to 10
2.1 Order numbers to 10

Level 2 — EDEXCEL 3

2.2 Read numbers to 100
2.2 Write numbers to 100
2.2 Order numbers to 100

Level 3 — EDEXCEL 4

2.3 Know what each digit represents - up to 100
2.3 Know what each digit represents - up to 1000
2.4 Round any positive integer less than 100 to the nearest 10
2.5 Order a given set of positive and negative integers, including placing them on a number line

03 EDEXCEL ENTRY LEVEL · TOPIC 3
Fractions, decimals and money

3 levels
16 generators

Level 1 — EDEXCEL 1

3.1 Recognise and use halves

Level 2 — EDEXCEL 3

3.2 Recognise and use halves of numbers up to 10 in context ×2
3.3 Recognise and use quarters

Level 3 — EDEXCEL 12

3.4 Recognise and use in context simple fractions, including thirds in context
3.4 Use decimal notation in recording money
3.4 Use decimal notation in recording length

Level 3 *continued*

3.5 Recognise the equivalence of very simple fractions
3.6 Recognise simple equivalents
3.7 Recognise unit fractions
3.7 Use unit fractions to find fractions of shapes and numbers ×2
3.8 Recognise simple fractions that are several parts of a whole and be able to shade shapes to illustrate those fractions
3.9 Find fractional quantities of numbers up to 20
3.10 Interpret a calculator display as money. (Calculator test only.)
3.11 Use a calculator to add and subtract money. (Calculator test only.)

EDEXCEL ENTRY LEVEL · TOPIC 4

04 Patterns in number

3 levels
11 generators

Level 1

EDEXCEL 4

- 4.1 Understand the operation of addition
- 4.1 Understand the operation of subtraction as taking away
- 4.1 Understand the operation of addition and subtraction and the relationship between them
- 4.2 Recognise situations to apply and use the operations to solve problems with whole numbers up to 10

Level 2

EDEXCEL 2

- 4.3 Use repeating patterns to develop ideas of regularity and sequencing
- 4.4 Explore and record patterns in addition and subtraction, explaining the patterns and using them to make predictions

Level 3

EDEXCEL 5

- 4.5 Explore and record patterns in addition and subtraction and the pattern of multiples, e.g. 3, 6, 9, 12, explaining the patterns and using them to make predictions
- 4.6 Know and use halving as the inverse of doubling
- 4.7 Halve even two-digit numbers with even tens
- 4.8 Double numbers up to 50
- 4.9 Halve even two-digit numbers with odd tens

EDEXCEL ENTRY LEVEL · TOPIC 5

05 Addition and subtraction facts

3 levels
5 generators

Level 1

EDEXCEL 1

- 5.1 Use apparatus to add and subtract numbers to 10

Level 2

EDEXCEL 1

- 5.2 Know addition and subtraction facts for each number to 10

Level 3

EDEXCEL 3

- 5.3 Know all addition and subtraction facts for each number to 20
- 5.4 Know multiplication and division facts relating to the 2s, 3s, 4s, 5s, and 10s
- 5.5 Identify pairs of factors of numbers up to 50

EDEXCEL ENTRY LEVEL · TOPIC 6

06 Calculations

2 levels
7 generators

Level 2

EDEXCEL 3

- 6.1 Add and subtract one- and two digit numbers
- 6.1 Add and subtract one- and two digit numbers, and use addition and subtraction to solve problems
- 6.2 Understand the operations of multiplication and division, and use them to solve problems with whole numbers, money or measures

Level 3

EDEXCEL 4

- 6.3 Add and subtract one-, two- and three-digit numbers
- 6.4 Understand and deal appropriately with remainders, including simple problems in context
- 6.5 Multiply a two-digit number by a single digit
- 6.6 Understand and use the different vocabulary for the four rules of number

EDEXCEL ENTRY LEVEL · TOPIC 7

07 Choosing methods

3 levels
3 generators

Level 1

EDEXCEL 1

- 7.1 Use given equipment for a stated purpose

Level 2

EDEXCEL 1

- 7.2 Choose a suitable method of computation, using equipment where appropriate

Level 3

EDEXCEL 1

- 7.3 Use a basic calculator – reading the display

08 EDEXCEL ENTRY LEVEL · TOPIC 8
Algebra

1 level
3 generators

Level 3 — EDEXCEL — 3

8.1 Solving very basic equations
8.2 Collect like terms
8.3 Use simple word formulae

09 EDEXCEL ENTRY LEVEL · TOPIC 9
Ratio and proportion

1 level
1 generator

Level 3 — EDEXCEL — 1

Level 3 *continued*

9.1 Use direct proportion in simple problems

10 EDEXCEL ENTRY LEVEL · TOPIC 10
Properties of 2D shapes

3 levels
7 generators

Level 1 — EDEXCEL — 3

10.1 Describe and discuss simple 2D shapes
10.2 Use the mathematical names for rectangle and circle
10.3 Recognise and use simple geometric features of simple 2D shapes

Level 2 — EDEXCEL — 1

10.4 Use the mathematical names for common 2D shapes

Level 3 — EDEXCEL — 3

10.5 Use the mathematical names for additional 2D shapes
10.6 Recognise reflective symmetry in simple cases
10.7 Sort shapes according to mathematical criteria

11 EDEXCEL ENTRY LEVEL · TOPIC 11
Properties of 3D shapes

3 levels
5 generators

Level 1 — EDEXCEL — 1

11.1 Describe and discuss simple 3D shapes

Level 2 — EDEXCEL — 2

11.2 Use the mathematical name for a cube
11.3 Recognise and use the following geometric features of 3D shapes: vertices, edges, faces

Level 3 — EDEXCEL — 2

11.4 Use the mathematical names for additional 3D shapes
11.5 Recognise and use the geometric features of 3D shapes, including vertices, edges and faces; cubes, cuboids, pyramids, cylinders, cones and spheres

12 EDEXCEL ENTRY LEVEL · TOPIC 12
Perimeter and area

1 level
3 generators

Level 3 — EDEXCEL — 3

12.1 Find perimeter of a rectangle by adding lengths of sides
12.2 Find area of a rectangle by counting squares
12.3 Find the area of a rectangle by multiplying length by width

13 EDEXCEL ENTRY LEVEL · TOPIC 13
Position and movement

3 levels
6 generators

Level 1 — EDEXCEL — 2

13.1 Describe positions using common words
13.2 Copy, continue and make patterns

Level 2 — EDEXCEL — 1

13.3 Recognise movements in a straight line and rotations

Level 3 — EDEXCEL — 3

13.4 Recognise movements in a straight line and rotations, and combine them in simple ways
13.5 Use mathematical vocabulary to describe position, direction and movement (including clockwise and anti-clockwise)
13.6 Read and plot coordinates in the first quadrant

14 EDEXCEL ENTRY LEVEL · TOPIC 14
Angles

2 levels
2 generators

Level 2 — EDEXCEL — 1

14.1 Understand angle as a measure of turn and recognise quarter-turns, half-turns and right angles

Level 3 — EDEXCEL — 1

14.2 Identify an angle as smaller than a right angle or bigger than a right angle

15 EDEXCEL ENTRY LEVEL · TOPIC 15
Measures

3 levels
6 generators

Level 1 — EDEXCEL — 1

15.1 Compare objects and events using appropriate language for direct comparison

Level 2 — EDEXCEL — 1

15.2 Compare objects and events using appropriate language for direct comparison using common standard units

Level 3 — EDEXCEL — 4

15.3 Use a wider range of standard units, including standard units of time, choosing units appropriate to a situation
15.4 Estimate with centimetres, metres, grams, kilograms, litres, seconds, minutes and hours
15.5 Express a length given in metres and in centimetres. Express a price given in pounds and in pence
15.6 Work with time, including 12-hour and 24-hour clocks

16 Reading scales and measures

EDEXCEL ENTRY LEVEL · TOPIC 16

3 levels
4 generators

Level 1

EDEXCEL 1

16.1 Use simple measuring instruments

Level 2

EDEXCEL 1

16.2 Choose simple measuring instruments

Level 3

EDEXCEL 2

16.3 Use simple measuring instruments, reading and interpreting number and scales with some accuracy

16.4 Use a protractor to measure acute and obtuse angles to the nearest 10°

17 Handling information

EDEXCEL ENTRY LEVEL · TOPIC 17

3 levels
15 generators

Level 1

EDEXCEL 2

17.1 Sort and classify a set of objects or pictures

17.2 Extract information from lists

Level 2

EDEXCEL 7

17.3 Sort and classify a set of objects using criteria related to their properties

17.4 Collect, record and read data arising from an area of interest, using tally charts

17.4 Record data as a bar chart

17.4 Record data as a pictogram

17.4 Read data from a bar chart

Level 2 *continued*

17.4 Read data from a pictogram

17.4 Read data from a simple table

Level 3

EDEXCEL 6

17.5 Collect, record data using tally charts with frequency column

17.5 Record data using bar charts

17.5 Record data using pictograms

17.5 Read data from a bar chart

17.5 Read data from a pictogram

17.6 Reading simple pie charts