

Eduqas GCSE Maths Formula Sheet 2026 and 2027 (C300): Foundation and Higher

Foundation and Higher, 2026 and 2027 exams

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Yes, every Eduqas GCSE Maths paper comes with formulae: an additional formulae sheet, printed inside the paper from summer 2026, and Eduqas's own formula list on page 2. This guide shows what is on both, and the formulae you must still learn by heart.

Quick answers

Do you get a formula sheet in Eduqas GCSE Maths?

Yes. The additional formulae and the formula list are both printed in every paper, at both tiers.

What is on the Foundation additional formulae?

Eight entries: area of a trapezium, volume of a prism, circumference of a circle, area of a circle, Pythagoras' theorem, the trigonometric ratios, compound interest and $P(A \text{ or } B)$.

What does the Higher sheet add?

The quadratic formula, the sine rule, the cosine rule, $\frac{1}{2}ab \sin C$ and $P(A \text{ and } B) = P(A \text{ given } B)P(B)$.

What is on the page 2 formula list?

The cone and sphere formulae and the three kinematics formulae, at both tiers.

What must I memorise?

Everything in the Memorise section, including arc length, sector area, cylinder volume, gradient, $y = mx + c$, depreciation, speed and density, plus the volume of a pyramid and pressure.

The four groups

On the sheet printed on the formula sheet you get with every paper.

Given in the question not on the sheet, but printed inside any question that needs it.

Memorise tested at your tier, and nobody gives it to you.

Not on spec not tested at your tier, so there is nothing to learn.

The last two are not the same thing. A formula your paper will never ask about is not one to memorise, and time spent learning it is time taken from something that will be tested.

What your exam gives you

Additional Formulae, printed "To be used alongside assessments up to and including November 2027". Official PDFs:

[Eduqas Additional Formulae, Foundation, for assessments up to November 2027](https://www.eduqas.co.uk/resources/AdditionalFormulae/Foundation/FoundationAdditionalFormulae.pdf) (eduqas.co.uk)

[Eduqas Additional Formulae, Higher, for assessments up to November 2027](https://www.eduqas.co.uk/resources/AdditionalFormulae/Higher/HigherAdditionalFormulae.pdf) (eduqas.co.uk)

In every paper, outside the sheet: Cone and sphere: πrl , $4\pi r^2$, $\frac{4}{3}\pi r^3$, $\frac{1}{3}\pi r^2 h$ (formula list on page 2);

Kinematics: $v = u + at$, $s = ut + \frac{1}{2}at^2$, $v^2 = u^2 + 2as$ (formula list on page 2)

[Read the full GCSE formula sheet guide](#)

Status table: Eduqas

Read across for your tier. Each status is Eduqas's own, for the 2026 and 2027 exams.

Formula	Foundation	Higher
AREA AND PERIMETER		
Area of a trapezium	On the sheet	On the sheet
Circumference and area of a circle	On the sheet	On the sheet
Area of a rectangle, parallelogram and triangle ($\frac{1}{2}bh$)	Memorise	Memorise
Arc length and area of a sector	Memorise	Memorise
Area of a segment	Not on spec	Memorise method: area of sector minus $\frac{1}{2}ab \sin C$
VOLUME AND SURFACE AREA		
Volume of a prism	On the sheet	On the sheet
Volume and surface area of a cuboid	Memorise	Memorise
Volume and surface area of a cylinder	Memorise	Memorise
Cone and sphere (volume and surface area)	On the sheet formula list, page 2	On the sheet formula list, page 2
Volume of a pyramid	Memorise	Memorise
ALGEBRA		
Quadratic formula	Not on spec	On the sheet
Difference of two squares	Memorise	Memorise
Completing the square	Not on spec	Memorise
n th term of a linear sequence	Memorise	Memorise
n th term of a quadratic sequence	Not on spec	Memorise
Direct and inverse proportion	Memorise	Memorise
TRIGONOMETRY		
Pythagoras' theorem	On the sheet	On the sheet
sin, cos and tan in a right-angled triangle	On the sheet	On the sheet
Exact values of sin, cos and tan	Memorise	Memorise
Sine rule, cosine rule and $\frac{1}{2}ab \sin C$	Not on spec	On the sheet
COORDINATE GEOMETRY		
Gradient, $y = mx + c$, midpoint, distance between two points	Memorise	Memorise
Perpendicular gradients	Not on spec	Memorise
Equation of a circle	Not on spec	Memorise
NUMBER AND FINANCE		
Compound interest (growth)	On the sheet	On the sheet
Depreciation	Memorise	Memorise
Percentage change, reverse percentage, simple interest	Memorise	Memorise
STATISTICS AND PROBABILITY		
$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$	On the sheet	On the sheet

Formula	Foundation	Higher
$P(A \text{ and } B) = P(A \text{ given } B)P(B)$	Not on spec	On the sheet
Mean, median, range, pie chart angles	Memorise	Memorise
Relative frequency, expected frequency, $P(\text{not } A)$	Memorise	Memorise
Interquartile range and frequency density	Not on spec	Memorise
Product rule for counting	Not on spec	Memorise
COMPOUND MEASURES		
Speed and density	Memorise	Memorise
Pressure	Memorise	Memorise
Kinematics ($v = u + at$ and the others)	On the sheet formula list, page 2	On the sheet formula list, page 2

Two rows catch students out. The sheet gives compound interest only as growth, $P\left(1 + \frac{r}{100}\right)^n$. For depreciation you need $P\left(1 - \frac{r}{100}\right)^n$, and no sheet prints it. The sheet also gives the volume of a prism, not of a cylinder. A cylinder is a prism with a circular cross-section, so its volume is $\pi r^2 h$, but you have to make that step yourself.

On the sheet: Additional Formulae

In Eduqas's own printed wording, from the sheets marked "To be used alongside assessments up to and including November 2027". The Foundation sheet has 8 entries; the Higher sheet has the same 8 plus 5 more.

Foundation and Higher

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

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

Circumference of a circle

Where r is the radius and d is the diameter:

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

Area of a circle

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

Pythagoras' theorem and trigonometry

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

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

Trigonometric ratios (sin, cos, tan)

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

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

Compound interest

Where P is the principal amount, r is the interest rate over a given period and n is number of times that the interest is compounded:

$$\text{Total accrued} = P\left(1 + \frac{r}{100}\right)^n$$

Probability

Where $P(A)$ is the probability of outcome A and $P(B)$ is the probability of outcome B :

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

Higher only

Quadratic formula

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

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

Sine rule

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

$$\text{sine rule: } \frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Cosine rule

$$\text{cosine rule: } a^2 = b^2 + c^2 - 2bc \cos A$$

Area of a triangle = $\frac{1}{2}ab \sin C$

$$\text{Area of a triangle} = \frac{1}{2}ab \sin C$$

Multiplication rule with conditional probability

$$P(A \text{ and } B) = P(A \text{ given } B)P(B)$$

The formula list on page 2 of every paper

Area and volume formulae

Where r is the radius of the sphere or cone, l is the slant height of a cone and h is the perpendicular height of a cone:

$$\text{Curved surface area of a cone} = \pi rl$$

Surface area of a sphere

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

Volume of a sphere

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

Volume of a cone

$$\text{Volume of a cone} = \frac{1}{3}\pi r^2 h$$

Kinematics formulae

Where a is constant acceleration, u is initial velocity, v is final velocity, s is displacement from the position when $t = 0$ and t is time taken:

$$v = u + at$$

Kinematics: $s = ut + \frac{1}{2}at^2$

$$s = ut + \frac{1}{2}at^2$$

Kinematics: $v^2 = u^2 + 2as$

$$v^2 = u^2 + 2as$$

The sheet writes the trig ratios with the letters of its own diagram: a is opposite angle A , b is next to it and c is the hypotenuse. Your exam triangle may be labelled differently or drawn the other way up, so match the sides to the sheet's diagram before you substitute.

Given in the question: Eduqas

Some formulae are not on the sheet but are printed inside any question that needs them. This is where the boards differ.

Formula	Foundation	Higher
Metric–imperial conversions	Given in the question	Given in the question

The cone, sphere and kinematics formulae are in the formula list on page 2 of every paper. Eduqas has not said it will give the volume of a pyramid or the pressure formula, so learn both. Its summer 2026 examiners' report noted candidates "who could not remember the formula for the volume of a pyramid".

Memorise: both tiers

Every England board tests these at both Foundation and Higher, and none of them is on the sheet or given in the question. This is where most formula marks are lost.

Area and perimeter

1. Area of a rectangle

length $\times$ width.

2. Area of a parallelogram

base $\times$ perpendicular height.

3. Area of a triangle

$\frac{1}{2} \times$ base $\times$ perpendicular height.

4. Arc length

$$\frac{\theta}{360} \times 2\pi r$$

5. Area of a sector

$$\frac{\theta}{360} \times \pi r^2$$

Volume and surface area

6. Volume of a cuboid

length $\times$ width $\times$ height.

7. Surface area of a cuboid

$$2(lw + lh + wh)$$

8. Volume of a cylinder

$$\pi r^2 h$$

9. Curved surface area of a cylinder

$$2\pi r h$$

10. Total surface area of a cylinder

$$2\pi r^2 + 2\pi r h$$

The sheet gives the volume of any prism as area of cross-section $\times$ length. A cuboid and a cylinder are both prisms, so you can rebuild either volume from the sheet: the cross-section of a cylinder is a circle, πr^2 , and its length is h .

Algebra

11. Difference of two squares

$$a^2 - b^2 = (a + b)(a - b)$$

12. nth term of a linear sequence

$dn + (a - d)$, where a is the first term and d is the common difference.

13. Direct proportion

$$y = kx$$

14. Inverse proportion

$$y = \frac{k}{x}$$

Foundation students need to understand and use $y = kx$ and $y = \frac{k}{x}$. Finding k and writing the equation yourself is Higher.

Coordinate geometry

15. Gradient

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

17. Midpoint

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

16. Equation of a straight line

$y = mx + c$, where m is the gradient and c is the y -intercept.

18. Distance between two points

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

Number and finance

19. Percentage change

$$\frac{\text{new} - \text{original}}{\text{original}} \times 100$$

21. Reverse percentage

original amount = $\frac{\text{new amount}}{\text{multiplier}}$; after a 15% increase, divide by 1.15.

20. One quantity as a percentage of another

$$\frac{A}{B} \times 100$$

22. Simple interest

$I = \frac{P \times r \times n}{100}$, for $r\%$ a year over n years.

23. Depreciation

$$P \left(1 - \frac{r}{100} \right)^n$$

Statistics

24. Mean

$$\frac{\text{sum of the values}}{\text{number of values}}$$

25. Mean from a frequency table

$$\frac{\sum fx}{\sum f}$$

26. Estimated mean from grouped data

$$\frac{\sum(f \times \text{midpoint})}{\sum f}$$

27. Median

the $\frac{n+1}{2}$ th value when the data are in order.

28. Range

largest value – smallest value.

29. Pie chart angle

$$\frac{\text{frequency}}{\text{total frequency}} \times 360^\circ$$

Probability

30. Probability of an event

$$\frac{\text{number of favourable outcomes}}{\text{total number of equally likely outcomes}}$$

31. Relative frequency

$$\frac{\text{number of times the outcome happens}}{\text{total number of trials}}$$

32. Expected frequency

$$P(A) \times \text{number of trials.}$$

33. Probability of an event not happening

$$P(\text{not } A) = 1 - P(A)$$

34. Mutually exclusive events

$$P(A \text{ or } B) = P(A) + P(B)$$

35. Independent events

$$P(A \text{ and } B) = P(A) \times P(B)$$

Compound measures

36. Speed

$$\frac{\text{distance}}{\text{time}}$$

38. Rate of pay

$$\frac{\text{pay}}{\text{hours worked}}$$

37. Density

$$\frac{\text{mass}}{\text{volume}}$$

39. Unit price

$$\frac{\text{total cost}}{\text{number of units}}$$

Also memorise for Eduqas

Volume of a pyramid

$$\frac{1}{3} \times \text{area of base} \times \text{height}$$

Pressure

$$\text{Pressure} = \frac{\text{force}}{\text{area}}$$

Higher only: memorise these too

Foundation papers do not test these. If you sit Higher, learn them as well.

1. Area of a segment

area of the sector – area of the triangle, $\frac{\theta}{360}\pi r^2 - \frac{1}{2}r^2 \sin \theta$.

2. Similar shapes

if lengths are multiplied by k , areas are multiplied by k^2 and volumes by k^3 .

3. Completing the square

$$x^2 + bx + c = \left(x + \frac{b}{2}\right)^2 - \left(\frac{b}{2}\right)^2 + c$$

4. nth term of a quadratic sequence

$an^2 + bn + c$, where a is half the second difference.

5. Perpendicular lines

$$m_1 \times m_2 = -1$$

6. Equation of a circle with centre at the origin

$$x^2 + y^2 = r^2$$

7. Interquartile range

upper quartile – lower quartile.

8. Frequency density

$$\frac{\text{frequency}}{\text{class width}}$$

9. Product rule for counting

if one choice can be made in m ways and a second in n ways, together they can be made in $m \times n$ ways.

Exact trigonometric values

Every England board expects these at both tiers, so learn them for the non-calculator paper.

	0°	30°	45°	60°	90°
sin	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
cos	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
tan	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	not needed

Formula mastery checklist

- ☐ I know which tier I am sitting and which sheet I will get.
- ☐ I can write every formula on the Memorise list from memory.
- ☐ I can turn the compound interest formula into the depreciation formula.
- ☐ I can rebuild the volume of a cylinder from the prism formula.
- ☐ I know the exact values of sin and cos for 0° , 30° , 45° , 60° and 90° , and of tan for 0° , 30° , 45° and 60° .

- ☐ Higher only: I can write the nine Higher-only formulae from memory.
- ☐ I have done at least one full paper with my board's formula sheet beside me.

Checked against Eduqas's official formulae sheets and specification, October 2026.

Official sources

[Eduqas Additional Formulae, Foundation, for assessments up to November 2027](#) (eduqas.co.uk)

[Eduqas Additional Formulae, Higher, for assessments up to November 2027](#) (eduqas.co.uk)

[Eduqas GCSE Mathematics \(C300\) specification, version 3, January 2019](#) (eduqas.co.uk)

[Eduqas Component 1 Foundation question paper, summer 2025](#) (wjec.co.uk)

[Eduqas GCSE Mathematics newsletter, September 2026](#) (eduqas.co.uk)

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