

Year 10 Maths Vocabulary List

(Tier 2 and Tier 3)



COMMAND WORDS (specific mathematical meaning)

Some of these command words will be in your exam. Make sure you read the full question in your exam.

Construct - Use mathematical instruments to draw accurately. Geometric instruments may be specified in the question. When constructing with compasses and a straight edge, show all of the arcs and lines that you use to make the construction.

Change - Usually convert from one unit to another; either using known metric unit conversions or the use of a conversion graph.

Estimate - Check, without a calculator, the result of a calculation by using suitable approximations. OR Give a reasonable numeric value that can be justified by the information in the question.

Expand - Multiply to remove brackets from a given expression to obtain an equivalent.

Explain - Write a sentence or a mathematical statement to show how you got to your answer or reached your conclusion.

Express - Re-write in another form, some working may be needed.

Factorise - Simplify a given expression by writing it as a product of two or more factors.

Prove – show what you have been asked to, ensuring all steps of your method/working are present. In the case of a geometrical proof, reasons must be given. For algebraic proof, you must make use of algebra.

Rearrange - Used with formulae, when students are requested to change the subject of a formula.

Round - Write values correct to the specific accuracy required.

Shade - Indicate, on a graph or a drawing, a region according to given conditions.

Simplify - Simplify a given expression by writing it as a product of two or more factors.

Sketch - Produce a drawing that does not have to be drawn to scale or a graph that is drawn without working out each coordinate.

Solve algebraically - Find the solution of an equation or inequality; algebraic manipulation must be shown.

Solve by - Use the method specified in the question to solve an equation or inequality.

Write...in the form... - Manipulate a given algebraic expression/fraction/ratio into the specified form or provide an answer in a particular way e.g. when giving an exact answer as a surd.

MATHEMATICAL WORDS

Acute angle - An angle less than 90° .

Adjacent - Sides that are next to each other and are joined by a common vertex.

Bearing – A three-digit angle measured from the north in a clockwise direction.

Denominator – Bottom part of a fraction.

Frequency – How often something occurs.

Gradient – How steep something is. Given as m in the equation of a line, $y=mx+c$. The higher the value, the steeper the line.

Hypotenuse – The longest side of a right-angled triangle.

Integer – A whole number.

Irrational – A number which is never ending.

Obtuse angle – An angle greater than 90° and less than 180° .

Numerator – Top part of a fraction.

Parallel – Two or more lines which are always the same distance apart.

Product – The answer when two values are multiplied together.

Reciprocal - The reciprocal of any number is 1 divided by the number. E.g. the reciprocal of 3 is $\frac{1}{3}$., the reciprocal of $\frac{3}{4}$ is $\frac{4}{3}$.

Reflex angle - An angle greater than 180° .

Vertex – Where two or more edges meet.

