

break-even point

the point or value at which a business stops making a loss and starts making a profit

coefficient

the number in front of a variable in a function

constant of variation

the constant of variation is the number that relates two variables that are directly proportional or inversely proportional to one another; it is the  $k$  in a variation formula

constant term

a number on its own in a function, without a variable beside it

dependent variable

the variable in a function that depends on another variable for its value

direct linear variation	the relationship between two variables (say $x$ and $y$ ) by an equation in the form $y = kx$ , where $k$ is the constant of variation
elimination method	an algebraic way of solving simultaneous equations in which the equations are added or subtracted so that one of the variables is eliminated
formula	a rule written as an algebraic equation, using variables
gradient	the slope of a line; the rise over the run
independent variable	a variable in a function whose values do not depend on any other variable

index laws

rules for simplifying algebraic expressions involving powers of the same base

index notation

a way of writing repeated multiplication using powers

like terms

terms with the same letter and power

linear function

a function of the form  $y = mx + b$ , whose graph is a straight line

power

the number of times a base is multiplied by itself

proportional to

a relationship between variables in which a change in one variable results in a direct change in the other variable

simultaneous equations

two or more equations that must be solved together so that the solution satisfies all equations

subject of a formula

the letter or variable alone on the left hand side of a formula

substitution method

an algebraic way of solving simultaneous equations in which one variable is made the subject of one equation, then that equation is substituted into the other equation

y-intercept

the value at which a straight line graph cuts the vertical axis