

asymptote

a line to which a curve gets very close but never actually touches

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

cubic function

a function in the form of $y = x^3 + c$

decreasing

the section of a curve for which the gradient of the tangent to the curve is negative

exponential function

a function in the form of $y = 2^x + c$ for example

exponential growth	growth whose rate becomes ever more rapid in proportion to the growing total number or size
hyperbola	the graph of a hyperbolic function
hyperbolic function	a function in the form of $y = a/x$
increasing	the section of a curve for which the gradient of the tangent to the curve is positive
initial value	the value at the beginning (when $t = 0$)

maximum

the highest value
reached

minimum

the lowest value
reached

model

using mathematics to
describe a real-life
pattern or relationship

non-linear function

a function that is not
in the linear form

parabola

the U-shaped graph of
a quadratic function

proportional to

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

quadratic function

a function in the form of $y = x^2 + bx + c$

vertex

the turning point of a parabola

vertical intercept

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