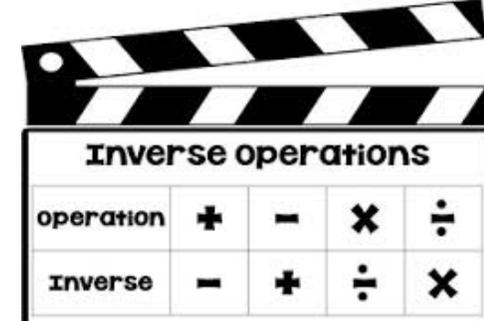


MATHS: Module 2

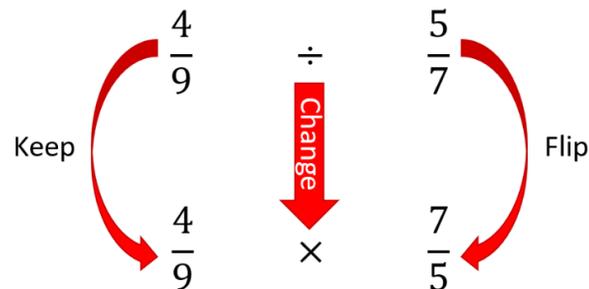
Fractions, decimals and percentages
 Formulae and functions
 Working in 2D
 Probability 1

Formulae and functions

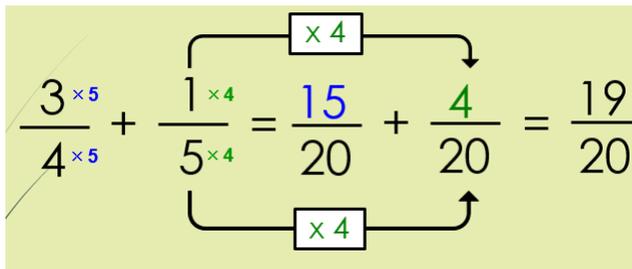


Inverse operations				
operation	+	-	×	÷
inverse	-	+	÷	×

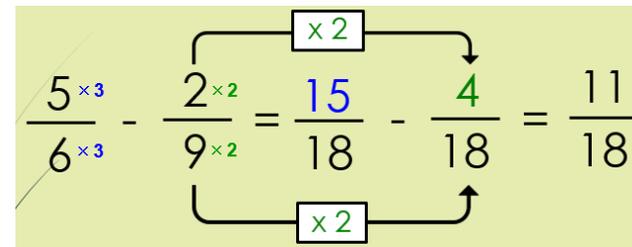
Dividing Fractions



Adding Fractions



Subtracting Fractions



Convert Fractions, Decimals and Percents

Multiplying Fractions

$$\frac{1}{2} \times \frac{2}{5} = \frac{1 \times 2}{2 \times 5} = \frac{2}{10}$$



Keywords	Definitions
Expand	Multiply to remove the brackets
Factorise	Put the brackets back into an expression by identifying HCF of terms
Substitution	Replacing a letter with a number and working out the value
Inverse	The inverse operation reverses the effect of the original operation
Term	A single number or variable, or numbers and variables multiplied together
Expression	A mathematical statement written using symbols, numbers or letters,
Equation	A statement showing that two expressions are equal
Formula	Shows the relationship between two or more variables
Identity	An equation that is true no matter what values are chosen. Usually contains '≡'
Function	A special relationship where each input has a single output
Composite function	A function made of two others, where the output of one is the input of another

Fractions, Decimals and Percentages

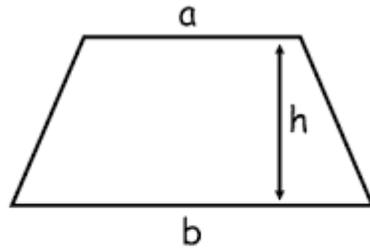
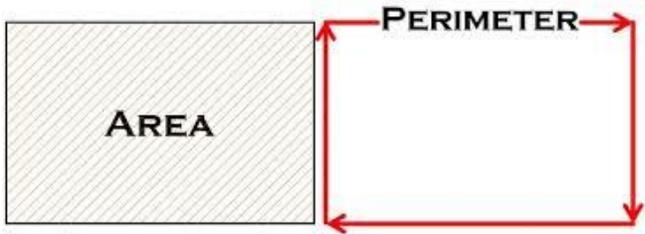
Keywords	Definitions
Simplify fraction	To reduce a fraction to make it as simple as possible
Equivalent fraction	Fractions which have the same value
Improper fraction	A fraction where the numerator is bigger than the denominator
Mixed number	A whole number and a fraction together
Percent	Out of 100
Terminating	A decimal with a definite number of digits
Recurring	A repeated pattern that does not terminate

Working in 2D

Key Words	Definitions
Perimeter	The total distance around the edges that outline a shape
Area	The amount of space occupied by a 2d shape
Bearing	A direction defined by a three-figure angle measured clockwise from North

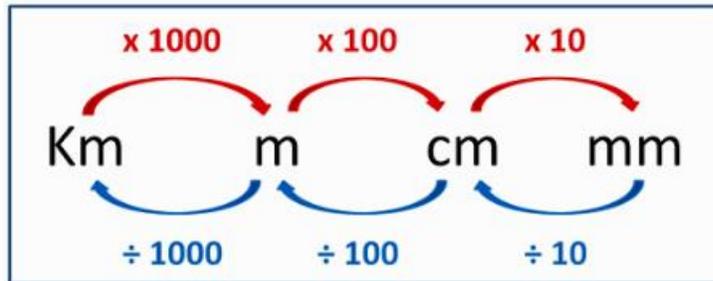
Probability 1

Keywords	Definition
Bias/Biased	All outcomes are not equally likely
Impossible	It cannot happen. The probability of it happening is 0.
Certain	It must happen. The probability of it happening is 1.
Relative Frequency	Number of times it happened over Number of time trials was done
Expected Frequency	Number of trials multiplied by probability of the event
Theoretical Probability	Number of favourable outcomes over Total number of possible outcomes

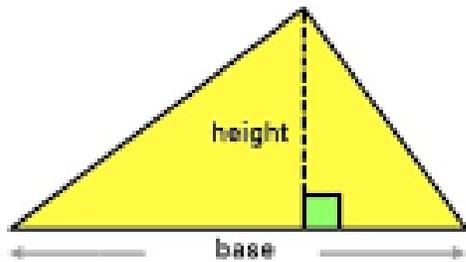
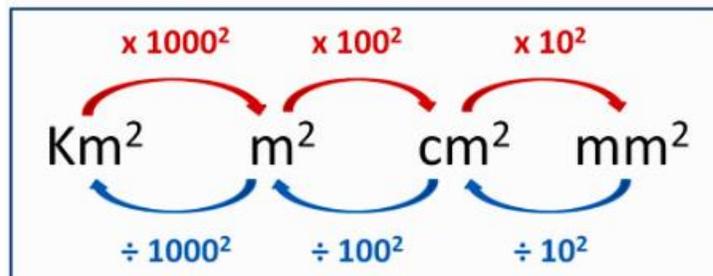


$$\text{Area of Trapezium} = \frac{1}{2}h(a+b)$$

Metric units of length conversion



Metric units of area conversion



$$\text{Area} = \frac{1}{2} \times \text{base} \times \text{perpendicular height}$$



$$\text{Area of parallelogram} = \text{Base} \times \text{Height}$$

The probability scale.

