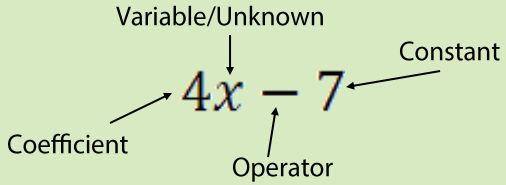
Maths	Name:		Year 7	Term 4	Trinity MAT



A **variable, or unknown**, is a letter symbol that can take any value.
A number on its own is called a **constant**.
A **coefficient** is a number that is multiplied by the variable. These should be written as a fraction rather than a decimal where needed. (**4*x*** means **4** times ***x***, so **4** is the coefficient).
An **operator** is a symbol (such as +, x, etc) that shows an operation.

Meaning of Algebraic Terms

$3d$ means 3 x d

$\frac{3}{a}$ means 3 divided by a

b^2 means b x b

t^3 means t x t x t

$3bc$ means 3 x b x c

$4s^3$ means 4 x s x s x s

Meaning of Symbols

$=$ is equal

$\equiv$ is identical to

$\neq$ is not equal to

$\geq$ is greater than or equal to

$>$ is greater than

$\leq$ is less than or equal to

$<$ is less than

Term a constant, a variable, or a constant multiplied by a variable or variables.

$\sqrt{3}a$ p^2 $3.7d$ $9b$ $\frac{1}{2}x$ 3π

Equation has an equals sign and may have one or more solutions.

$3x - 7 = 11$

$3(x + 2) \equiv 3x + 6$ **Identity** – the two sides are equal for every value of the variable.

$4p^2 - 3.2q$ **Expression** is a term or a collection of terms with no equals sign.

$F = ma$

Important Sequences

	Term to term rule	nth term	
Odd numbers	+ 2	2n ± 1	1, 3, 5, 7, 9, ...
Even numbers	+ 2	2n	2, 4, 6, 8, ...
Multiples of 3	+3	3n	3, 6, 9, 12 ...
Square numbers	Add consecutive odd numbers	n^2	1, 4, 9, 16...
Triangle numbers	Add consecutive numbers	$\frac{n(n+1)}{2}$	1, 3, 6, 10, ...
Prime numbers	Nobody knows... YET!		2, 3, 5, 7, 11, ...
Fibonacci numbers	Add the two previous terms	Only approximations	1, 1, 2, 3, 5,...

Times Tables

1 x 6 = 6
2 x 6 = 12
3 x 6 = 18
4 x 6 = 24
5 x 6 = 30
6 x 6 = 36
7 x 6 = 42
8 x 6 = 48
9 x 6 = 54
10 x 6 = 60
11 x 6 = 66
12 x 6 = 72

1 x 9c = 9c
2e x 9 = 18e
3 x 9d = 27d
4f x 9= 36f
5s x 9 = 45s
6 x 9s = 54s
7j x 9 = 63j
8 x 9u = 72u
9 x 9y =81y
10 x 9r = 90r
11r x 9 = 99r
12e x 9= 108e