

Algebraic Notation

Key Vocabulary

Term — A single number or variable or a variable multiplied by a number e.g. $4a$

Expression — **Ex/pres/sion** — A collection of terms e.g. $4a + 6a$ or $7a - 3$

Commutative — **Com/mu/ta/tive** — A calculation that can be carried out in any order and still give the same result

Coefficient — **Co/eff/ic/ient** — A number

Substitute — **Sub/sti/tute** — To change the value of a variable in an expression to a given value

Inverse — **In/ver/se** — To carry out the opposite of an operation.

Algebraic Notation

- $4a = 4 \times a$, not $4+a$
- $st = s \times t$
- $m \times m = m^2$
- $t \div 5 = \frac{t}{5}$
- $2a + b = 2 \times a + b$
- $3a \times 4 = 12a$

Commutative

$$a + b = b + a$$

$$s \times t = t \times s$$

(Can be done in any order)

$$a - b \quad b - a$$

$$s \div t \neq t \div s$$

These are not commutative as they can't be calculated in any order.

Substitution

$$a = 4 \text{ and } b = 3$$

- $a + 5$
- $4 + 5 = 9$
- ♦ $2a$
- ♦ $2 \times 4 = 8$
- * $a - b$
- * $4 - 3 = 1$
- ♦ $4b + a$
- ♦ $4 \times 3 + 4 = 16$

Function Machines

