

Year 6 Maths - Summer Term 1 - Algebra



Vocabulary	
BODMAS (y6)	BIDMAS (y6)
Simplify (y6)	Linear sequence (y5)
New Vocabulary	
symbol	letter
formula(e)	algebraic
terms	equation
unknown	variable
constant	generalise
algebraically	

Key Definitions:

Equations - a number sentence which uses an equal sign to separate two expressions which have the same value

Expression - groups of numbers, variables and operation symbols that give a value

Variable - a value represented by a letter or symbol

Substitution into formulas

Swap the letters for the numbers that you know.

Eg.
If $x = 3$ what is y when $y = 2x + 4$

$$y = (2 \times 3) + 4$$

$$y = 6 + 4$$

$$y = 10$$

Equation example

Take a number n lets call this number 'n'	double it $2 \times n$ (times it by 2)	add 3 $2n + 3$
---------------------------------------------------	----------------------------------------------	-------------------

If 'n' was 4, then $2n + 3 = 11$.
This is called an equation.

TOP TIP!

When letters or numbers are next to each other in an equation, it means they need to be multiplied e.g.

$Ab = 12$ means $A \times b = 12$
 $5c = 10$ means $5 \times c = 10$

Linear sequence

A linear number sequence is a sequence of numbers where each number increases or decreases by the same amount each time.

Each number in a linear number sequence is called a term.

The constant change between each number is called the term to term rule.

Use formulae to help find perimeter, area or volume of shapes

4cm

10cm

For a rectangle, the perimeter could be shown as $P = 2(L + W)$ because we add the length and the width and then multiply by 2.

Answer = 28cm

The area could be shown as $A = LW$ because we multiply length and width to find area.

Answer = 40cm²

Essential Knowledge

$$a + a + a = 3a$$

$$4 \times d = 4d$$

$$y \times y \times y = y^3$$

$$7 \times e \times f = 7ef$$

$$ab = a \times b$$

$$a^2 = a \times a$$

$$\frac{a}{b} = a \div b$$