ALGEBRA BOOT CAMP

VOCABULARY

TO EFFECTIVELY SOLVE PROBLEMS, YOU MUST FIRST HAVE THE BASE KNOWLEDGE.

DEFINITION	EXAMPLE
Algebraic expression Numbers, symbols, and operators (such as + and x) grouped together that show the value of something	$2x + 4$
Equal (equal sign) What is on one side of the sign is equal in <u>value</u> to what is on the other side of the sign.	$2 + 2 = 4$ 2 toonies = 4 dollars
Algebraic equation An algebraic equation with an equal sign that is equal to a number or a second algebraic equation	$2x + 4 = 8$ $2x + 4 = x + 6$
Variable A symbol for a number we don't know yet (usually a letter like x or y)	x y
Constant A fixed value	5
Coefficient A number used to multiply a variable	$2x$
Pattern Things are arranged following a rule or rules	Each number in a series is 2 more than the next (or $y = x + 2$)
Linear equation An equation that makes a straight line when it is graphed	$y = mx + b$
Distributive property Multiplying a number by a group of numbers added together is the same as doing each multiplication separately	$10 \times (2+2) = 40$ $(10 \times 2) + (10 \times 2) = 40$ $a(b + c) = ab + ac$
Expand Using the distributive property to remove brackets in an algebraic expression.	$7(c+2)$ $7c + 14$
Ordered pair Two numbers written in a certain order, used to show a position on a graph	$(4, 5)$

Discrete data Data that can only take certain values	The number of students in a class (you can't have half a student)

How does this scale apply to algebra?

- Algebra is like a balanced scale. Whatever you do to one side of the equation, you must also do to the other side to keep it in balance (true)