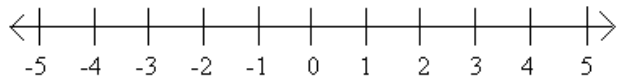


Unit 5 – Negative numbers

No.	Question	Answer	Example
5.1	What is a positive number?	Any number greater than zero	1, 2, 3.7, 101, $\frac{3}{5}$
5.2	What is a negative number?	Any number smaller than zero	-0.7, -5, -72, $-\frac{7}{12}$
5.3	A positive x a positive is a...	Positive	$3 \times 4 = 12$ $6 \times 12 = 72$
5.4	A positive x a negative is a...	Negative	$5 \times -2 = -10$ $8 \times -3 = -24$
5.5	A negative x a positive is a...	Negative	$-9 \times 2 = -18$ $-4 \times 10 = -40$
5.6	A negative x a negative is a...	Positive	
5.7	What is the absolute value of a number?	It's distance from 0	-4 & 4 both have an absolute value of 4 -12 & 12 both have an absolute value of 12
5.8	How do you add a negative number?	Use your number line and remember, if you are adding a negative number, your answer should be smaller than what you started with.	$3 + -6 = -3$ $10 + -4 = 6$ $-5 + -7 = -12$
5.9	How do you subtract a negative number?	Use a number line. If you are subtracting a negative, your answer should be bigger than what you started with.	$3 - -6 = 9$ $10 - -4 = 14$ $-7 - -5 = -2$

Unit 5 top tip:

If you are stuck draw a number line!



Unit 6- Expressions, Equations and Inequalities

No.	Question	Answer	Example
6.1	What is a variable?	A letter used to represent an unknown number	$x, y, a, b, \alpha, \gamma, \delta, \theta$ etc
6.2	What is a term?	Each part of an expression	In the expression: $2x - 2 + y^3$
6.3	What is the constant?	The number on its own	$2x, -2$ and y^3 are all terms.
6.4	What is a coefficient?	The number in front of the variable e.g. $2x$ (2 is the coefficient of x)	-2 is a constant. in the term " $2x$ ", 2 is the coefficient of x .
6.3	What is an expression?	A mixture of numbers and letters	$2x + 5$ or $y^2 - 2x + 5$
6.4	What is an equation?	Two expressions equal to one another	$2x + 5 = 10$ $17 - 2y = 13$
6.6	What does substitute mean?	Replace the variable with a number	Taking $x = 5$, what is the value of $2x$? $2(5) = 2 \times 5 = 10$
6.7	What does solve mean?	Find the variable	Solve the equation: $10 - x = 7$ $x = 3$
6.8	What are like terms?	Terms that have the same letter and same index	$2x^2$ and $5x^2$ $-10a$ and $7a$
6.9	What does simplify mean?	Collect the like terms	$2x^2 + 5x^2 = 7x^2$ $9a - 5a = 4a$
6.10	What is an inequality?	Expressing a variable has a range of values	$x > 10$ $y < -3$
6.11	>	Greater than	$15 > 3$
6.12	<	Less than	$-6 < -1$

Unit 6 top tip:

When collecting like terms, remember to pay attention to the sign in front of the term:

$$3x + 5y - 2x + 8y = x + 13y$$