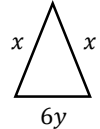


Unit 5 – positive and negative numbers

No.	Question	Answer	Example
5.1	What is an integer?	A whole number	7, 10, (-5), 123
5.2	What is a positive number?	Any number greater than zero	2, 10, 150
5.3	What is a negative number?	Any number smaller than zero	(-4), (-5), -123
5.4	What is absolute value of a number	The distance it is from zero	The absolute value of -3 is 3. The absolute value of 2 is 2.
5.5	What does > mean?	Greater than.	$3 > 2$
5.6	What does < mean?	Smaller than	$2 < 3$
5.7	What does = mean?	Equal to	$3 = 3$
5.8	How can we think of adding?	Translating a point on a number line	$(-3) + 5$ is translating (-3) by 5 spaces to the right
5.9	What does sum mean?	Add	The sum of 4 and 5 is 9
5.10	What does subtract mean?	Take away	10 subtract 4 is 6
5.11	What is a scale factor?	How much the number has been scaled by	$3 \times (-10) = 30$. This is stretching (-10) by a scale factor of 3.
5.12	What is a negative scale factor?	How much the number has been scaled by in the opposite direction	$(-3) \times (-8) = (-24)$. This is stretching (-8) by a scale factor of (-3).
5.13	What is commutativity?	The operation can be applied to two numbers in any order	$(-2) \times (-7) = (-14)$ $(-7) \times (-2) = (-14)$
5.14	What is associativity?	Grouping numbers to make the calculation easier	$5 \times (-18)$ is the same as $5 \times 2 \times (-9)$ $= 10 \times (-9)$ $= 90$

Unit 6 – expressions, equations and inequalities

No.	Question	Answer	Example
6.1	What does $7y$ mean?	$7 \times y$	
6.2	What does ab mean?	$a \times b$	
6.3	What does $3uv$ mean?	$3 \times u \times v$	
6.4	What does $\frac{x}{4}$ mean?	$x \div 4$	
6.5	What is a term?	The separate parts of an expression	7, a, 2a, a^2
6.6	What is a variable?	An unknown number represented by a letter	a, b, x, y
6.7	What is an expression?	A mixture of numbers and letters (no equals sign)	$7a + b - 3c$
6.8	What does substitute mean?	Replace the letters with the numbers	$a = 3, b = 5, c = 2$ so... $a + b + c$ is... $3 + 5 + 2 = 10$
6.9	What are algebraic constants?	Like terms that have the same letter and same index	$3p, 9p, -5p$ $4x^2, 12x^2, -x^2$
6.10	What does simplify mean?	Collect the like terms	$2 + b + 3 + 2b = 5 + 3b$
6.11	What does expand mean?	Multiply the coefficient outside the brackets with each term inside the brackets	$4(3 + x) = 12 + 4x$
6.12	What does factorise mean?	Find the common factor of all the terms and divide so that it is outside the bracket	$12 + 4x = 4(3 + x)$
6.13	What is an equation?	Two things are equal to one another (equal sign and two 'sides')	$7a + 1 = 8$
6.14	What is a coefficient?	The number in front of the variable	$3x$ (3 is the coefficient of x)
6.15	What is an inequality?	A symbol to compare two expressions	$2x < 5x$ $5 > 3$
6.16	What is the perimeter?	The total length of all the sides of a shape	 Perimeter = $x + x + 6y$ $= 2x + 6y$
6.17	What does strategic mean?	Working in a logical way	Counting rows of dots instead of randomly