

## Topic: Basic Number and Decimals

Topic/Skill	Definition/Tips	Example
1. Integer	A <b>whole number</b> that can be positive, negative or zero.	-3, 0, 92
2. Decimal	A number with a <b>decimal point</b> in it. Can be positive or negative.	3.7, 0.94, -24.07
3. Negative Number	A number that is <b>less than zero</b> . Can be decimals.	-8, -2.5
4. Addition	To find the <b>total</b> , or <b>sum</b> , of two or more numbers.  'add', 'plus', 'sum'	$3 + 2 + 7 = 12$
5. Subtraction	To find the <b>difference</b> between two numbers. To find out how many are left when some are taken away.  'minus', 'take away', 'subtract'	$10 - 3 = 7$
6. Multiplication	Can be thought of as <b>repeated addition</b> .  'multiply', 'times', 'product'	$3 \times 6 = 6 + 6 + 6 = 18$
7. Division	Splitting into equal parts or groups. The process of calculating the <b>number of times one number is contained within another one</b> .  'divide', 'share'	$20 \div 4 = 5$  $\frac{20}{4} = 5$
8. Remainder	The amount ' <b>left over</b> ' after dividing one integer by another.	The remainder of $20 \div 6$ is 2, because 6 divides into 20 exactly 3 times, with 2 left over.
9. BIDMAS	An acronym for the <b>order</b> you should do calculations in.  BIDMAS stands for ' <b>Brackets, Indices, Division, Multiplication, Addition and Subtraction</b> '.  Indices are also known as 'powers' or 'orders'.  With strings of division and multiplication, or strings of addition and subtraction, and no brackets, work from left to right.	$6 + 3 \times 5 = 21, \text{not } 45$  $5^2 = 25$ , where the 2 is the index/power.  $12 \div 4 \div 2 = 1.5, \text{not } 6$
10. Recurring Decimal	A decimal number that has <b>digits that repeat forever</b> .  The part that repeats is usually shown by placing a dot above the digit that repeats, or	$\frac{1}{3} = 0.333 \dots = 0.\dot{3}$  $\frac{1}{7} = 0.142857142857 \dots = 0.\dot{1}4285\dot{7}$

	dots over the first and last digit of the repeating pattern.	$\frac{77}{600} = 0.128333 \dots = 0.128\dot{3}$
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