Column Addition	Column Subtraction	Column Multiplication	Short and Long Division

Column Addition

	4	5	8	6	4
+	2	3	4	9	7
	6	9	3	6	1

    1   1   1

Column Subtraction

	3	5	$^6\!\!\not7$	$^{13}\!\!\not4$	$^1\!\!\not2$
-		3	4	7	6
		3	2	2	6	6

Column Multiplication

    1   3   2

		1	5	4
×			2	6
		9	2	4
3	0	8	0
4	0	0	4

    1   1

Short and Long Division

			4	4	0	5
12	5	^{5}2	^{4}8	6	^{6}0

			1	2	0	r 3
14	1	6	8	3	
	1	4	0	0	—
		2	8	3	
		2	8	0	—
			3	

B	**B**rackets	Complete anything in brackets first	10 x (4 + 2) = 10 x 6 = 16
O	**O**rders	Squares, cubes, square roots	$5 + 3^2 =$ 5 + 9 = 14
D	**D**ivision	Next do division and multiplication (if there are both, complete left to right)	10 + 6 ÷ 2 = 10 + 3 = 13
M	**M**ultiplication		10 – 4 x 2 = 10 - 8 = 2
A	**A**ddition	Then do addition and subtraction (if there are both, complete left to right)	10 x 4 + 7 = 40 + 7 = 47
S	**S**ubtraction		10 ÷ 2 – 3 = 5 - 3 = 2

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Term	Definition	Example
factor	a number that divides exactly into another number – (helpful to find them in pairs)	factors of 12 are **1** and **12** **2** and **6** **3** and **4**
common factor	factors of two numbers that are the same	Factors of 48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48 Factors of 30: 1, 2, 3, 5, 6, 10, 15, 30 Common factors are 1, 2, 3, 6
prime number	a number with only 2 factors: 1 and itself	2, 3, 5, 7, 11, 13, 17, 19…
composite number	a number with more than two factors	20 is composite factors are 1, 20 2, 10 4, 5
prime factor	a factor that is prime number	Factors of 10 are 1, 10 2,5 these are prime factors
multiple	the result of multiplying a number by an integer	Multiples of 7 are 7, 14, 21, 28 …
common multiple	multiples of two numbers that are the same	Multiples of 3: 3, …, 18, 21, 24, …, 39, 42 Multiples of 7: 7, 14, 21, 28, 35, 42 Common multiples of 3 and 7 are 21 42
square numbers	the result when a number has been multiplied by itself	$25 \ (5^2 = 5 \times 5)$ $49 \ (7^2 = 7 \times 7)$
cube numbers	the result when a number has been multiplied by itself 3 times	$8 \ (2^3 = 2 \times 2 \times 2)$ $27 \ (3^3 = 3 \times 3 \times 3)$