

Year 6 Four Operations

Prime Numbers



A prime number has only 2 factors which are itself and 1.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Common Factors



Common factors are the factors that two or more numbers share.

24

1	2	3	4	6	8	12	24
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16

1	2	4	8	16
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The common factors here are 1, 2, 4 and 8.



Common Multiples



Common multiples are the multiples that two or more numbers share.

2

2	4	6	8	10	12	14	16	18
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6

6	12	18	24	30	36	42
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The common multiples here are 12 and 18...



Cube Numbers

Cube numbers are the result of multiplying a number by itself twice. For instance: $4 \times 4 \times 4 = 64$.



$1^3 = 1 \times 1 \times 1 = 1$

$2^3 = 2 \times 2 \times 2 = 8$



$3^3 = 3 \times 3 \times 3 = 27$



$4^3 = 4 \times 4 \times 4 = 64$



Square Numbers

Square numbers are the result of multiplying a number by itself. For instance: $4 \times 4 = 16$ and $5 \times 5 = 25$.

$4^2 = 16$ $5^2 = 25$



x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	4	9	16	25	36	49	64	81	100	121	144
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Order of Operations

BODMAS is a way of remembering the order in which operations should be calculated.



B	Brackets	$10 \times (4 + 2) = 10 \times 6 = 60$
O	Order	$5 + 2^2 = 5 + 4 = 9$
D	Division	$10 + 6 \div 2 = 10 + 3 = 13$
M	Multiplication	$10 - 4 \times 2 = 10 - 8 = 2$
A	Addition	$10 \times 4 + 7 = 40 + 7 = 47$
S	Subtraction	$10 \div 2 - 3 = 5 - 3 = 2$