	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	187	198	209	220
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221	234	247	260
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238	252	266	280
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300
16	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320
17	17	34	51	68	85	102	119	136	153	170	187	204	221	238	255	272	289	306	323	340
18	18	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306	324	342	360
19	19	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380
20	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400

Prime Numbers 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97

Composite (not prime) 1, 4, 6, 8, 9, 10, 12, 14, 16 ...

2 | 10 40
5 8

GCF = Greatest common factor (#'s on side)
LCM = Least common multiple (Side x bottom)

x	x^2	$\sqrt{x}$
1	1	1
2	4	1.414214
3	9	1.732051
4	16	2
5	25	2.236068
6	36	2.44949
7	49	2.645751
8	64	2.828427
9	81	3
10	100	3.162278
11	121	3.316625
12	144	3.464102

Rational Number: A number that can be written as a quotient of two numbers (a fraction)
Irrational Number: A non-terminating, non-repeating decimal (Pi is an example - 3.1415926...)

π (Pi) = *3.141592*

MEAN: In a collection of data, *the sum of all the data divided by the number of data.*

MEDIAN: The *middle number* or *average of the two middle numbers* in a collection of data when the data are arranged in order.

MODE: The *number or numbers that occur most often* in a collection of data.

RANGE: The *difference between the greatest and the least numbers* in a collection of data.

DISTANCE TRAVELED: distance = rate × time (d = rt)

PRODUCT : Multiplication a(b)

QUOTIENT : Division (a ÷ b)

SUM: Addition (a + b)

DIFFERENCE: Subtraction (a – b)

Basic Properties:

Commutative: a + b = b + a; ab = ba

Associative: (a + b) + c = a + (b + c); (ab)c=a(bc)

Identity: a + 0 = a; a(1) = a

Inverse: a + (-a) = 0; $\frac{a}{b} \times \frac{b}{a} = 1$

Property of -1: (-1)a = -a

Distributive Property:

a(b + c) = ab + ac or (b + c)a = ba + ca

Product of Powers	$a^m \cdot a^n = a^{m+n}$
Power of Product	$(ab)^m = a^m b^m$
Zero Exponent	$a^0 = 1$
Power of a Power	$(a^m)^n = a^{m \times n}$
Quotient of a Power	$\frac{a^m}{a^n} = a^{m-n}$
Power of Quotient	$\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}$
Negative Exponent	$a^{-n} = \frac{1}{a^n}$

English Units
5280 feet = 1 mile
3 feet = 1 yard
12 inches = 1 foot

Metric Units of Length
1 Kilometer = 1000 meters
1 Hectometer = 100 meters
1 Dekameter = 10 meters
1 Meter = 1 meter
1 Decimeter = 0.1 meter
1 Centimeter = 0.01 meter
1 Millimeter = 0.001 meter

English Conversions
8 ounces = 1 cup
2 cups = 1 pint
2 pints = 1 quart
4 quarts = 1 gallon
16 ounces = 1 pint
8 pints = 1 gallon
16 ounces = 1 pound

Conversions (English to Metric)
1 inch = 2.54 cm (=0.0254 m)
1 cm = 0.393 inches
1 foot = 0.3048 meters
1 meter = 3.2808 feet
1 yard = 0.9144 meters
1 mile = 1609.344 meters
1 kilometer = 0.6213 miles
1 liter = 0.26417 gallons
1 gallon = 3.785 liters
1 pound = 0.45359237 kg
1 kg = 2.2046 pounds