



USEFUL TECHNICAL DATA

TEMPERATURE CONVERSION

Look up readings in middle column (shaded). If in degrees Centigrade, read Fahrenheit equivalent in right-hand column; if in Fahrenheit degrees, read Centigrade equivalent in left-hand column.

C	F C	F		C	F C	F		C	F C	F
-73	-100	-148		5.0	41	105.8		33.3	92	197.6
-68	-90	-130		5.6	42	107.6		33.9	93	199.4
-62	-80	-112		6.1	43	109.4		34.4	94	201.2
-57	-70	-94		6.7	44	111.2		35.0	95	203.0
-51	-60	-76		7.2	45	113.0		35.6	96	204.8
-46	-50	-58		7.8	46	114.8		36.1	97	206.6
-40	-40	-40		8.3	47	116.6		36.7	98	208.4
-34	-30	-22		8.9	48	118.4		37.2	99	210.2
-29	-20	-4		9.4	49	120.2		37.8	100	212.0
-23	-10	14		10.0	50	122.0				
-17.8	0	32		10.6	51	123.8		43	110	230
-17.2	1	33.8		11.1	52	125.6		49	120	248
-16.7	2	35.6		11.7	53	127.4		54	130	266
-16.1	3	37.4		12.2	54	129.2		60	140	284
-15.6	4	39.2		12.8	55	131.0		66	150	302
-15.0	5	41.0		13.3	56	132.8		71	160	320
-14.4	6	42.8		13.9	57	134.6		77	170	338
-13.9	7	44.6		14.4	58	136.4		82	180	356
-13.3	8	46.4		15.0	59	138.2		88	190	374
-12.8	9	48.2		15.6	60	140.0		93	200	392
-12.2	10	50.0		16.1	61	141.8		99	210	410
-11.7	11	51.8		16.7	62	143.6		100	212	413.6
-11.1	12	53.6		17.2	63	145.4		104	220	428
-10.6	13	55.4		17.8	64	147.2		110	230	446
-10.0	14	57.2		18.3	65	149.0		116	240	464
-9.4	15	59.0		18.9	66	150.8		121	250	482
-8.9	16	60.8		19.4	67	152.6		127	260	500
-8.3	17	62.6		20.0	68	154.4		132	270	518
-7.8	18	64.4		20.6	69	156.2		138	280	536
-7.2	19	66.2		21.1	70	158.0		143	290	554
-6.7	20	68.0		21.7	71	159.8		149	300	572
-6.1	21	69.8		22.2	72	161.6		154	310	590
-5.6	22	71.6		22.8	73	163.4		160	320	608
-5.0	23	73.4		23.3	74	165.2		166	330	626
-4.4	24	75.2		23.9	75	167.0		170	338	640
-3.9	25	77.0		24.4	76	168.8		171	340	644
-3.3	26	78.8		25.0	77	170.6		177	350	662
-2.8	27	80.6		25.6	78	172.4		182	360	680
-2.2	28	82.4		26.1	79	174.2		186	366	691
-1.7	29	84.2		26.7	80	176.0		188	370	698
-1.1	30	86.0		27.2	81	177.8		193	380	716
-.6	31	87.8		27.8	82	179.6		198	388	730
0	32	89.6		28.3	83	181.4		199	390	734
.6	33	91.4		28.9	84	183.2		204	400	752
1.1	34	93.2		29.4	85	185.0		208	406	763
1.7	35	95.0		30.0	86	186.8		210	410	770
2.2	36	96.8		30.6	87	188.6		216	420	788
2.8	37	98.6		31.1	88	190.4		221	430	806
3.3	38	100.4		31.7	89	192.2		227	440	824
3.9	39	102.2		32.2	90	194.0		232	450	842
4.4	40	104.0		32.8	91	195.8				



USEFUL TECHNICAL DATA

MEASURES OF PRESSURE

1 pound per square inch = 144 pounds per square foot = 0.068 atmosphere = 2.042 inches of mercury at 62 degree F. = 27.7 inches of water at 62 degrees F. = 2.31 feet of water at 62 degrees F.
 1 atmosphere = 30 inches of mercury at 62 degrees F. = 14.7 pounds per square inch = 2116.3 pounds per square foot = 33.95 feet of water at 62 degrees F.
 1 foot of water at 62 degrees F. = 62.355 pounds per square foot = 0.433 pound per square inch.
 1 inch of mercury at 62 degrees F. = 1.132 inches of water = 13.58 inches of water = 0.491 pound per square inch
 Column of water 12 in. high, 1 in. dia. = .341 lb.

LENGTH CONVERSION CONSTANTS

Metric to U.S.

Millimeters x .039370 = inches
 Meters x 39.370 = inches
 Meters x 3.2808 = feet
 Meters x 1.09361 = yards
 Kilometers x 3.280.8 = feet
 Kilometers x .62137= Statute Miles
 Kilometers x .53959 = Nautical Miles

U.S. to Metric

Inches x 25.4001 = millimeters
 Inches x .0254 = meters
 Feet x .30480 = meters
 Yards x .91440 = meters
 Feet x .0003048 = kilometers
 Statute Miles x 1.60935 = kilometers
 Nautical Miles x 1.85325 = kilometers

WEIGHT CONVERSION CONSTANTS

Metric to U.S.

Grams x 981 = dynes
 Grams x 15.432 = grains
 Grams x .03527 = ounces (Avd.)
 Grams x .033818 = fluid ounces (water)
 Kilograms x 35.27 = ounces (Avd.)
 Kilograms x 2.20462 = pounds (Avd.)
 Metric Tons (1000 Kg) x 1.10231= Net Ton (2000 lbs.)
 Metric Tons (1000 Kg) x .98421 = Gross Ton (2240 lbs.)

U.S. to Metric

Dynes x .0010193 = grams
 Grains x .0648 = grams
 Ounces (Avd.) x 28.35 = grams
 Fluid Ounces (Water) x 29.57 = grams
 Ounces (Avd.) x .02835 = kilograms
 Pounds (Avd.) x .45359 = kilograms
 Net Ton (2000 lbs.) x .90719 = Metric Tons (1000 Kg.)
 Gross Ton (2240 lbs.) x 1.01605 = Metric Tons (1000 kg.)

AREA CONVERSION CONSTANTS

Metric to U.S.

Square Millimeters x .00155 = square inches
 Square Centimeters x .155 = square inches
 Square Meters x 10.76387 = square feet
 Square Meters x 1.19599 = square yards
 Hectares x 2.47104 = acres
 Square Kilometers x 247.104 = acres
 Square Kilometers x .3861 = square miles

U.S. to Metric

Square Inches x 645.163 = square millimeters
 Square Inches x 6.45163 = square centimeters
 Square Feet x .0929 = square meters
 Square Yards x .83613 square meters
 Acres x .40469 = hectares.
 Acres x .0040469 = square kilometers
 Square Miles x 2.5899 = square kilometers

EXPONENTIAL NUMBERS

<u>Prefixes</u>	<u>Symbols</u>	<u>Multiples & Submultiples</u>	<u>Prefixes</u>	<u>Symbols</u>	<u>Multiples & Submultiples</u>
Tera	T	1 000 000 000 000-10 ¹²	Milli	m	0.001-10 ⁻³
Giga	G	1 000 000 000-10 ⁹	Micro	u	0.000 001-10 ⁻⁶
Mega	M	1 000 000-10 ⁶	Nano	n	0.000 000 001-10 ⁻⁹
Kilo	K	1 000-10 ³	Pico	p	0.000 000 000 001-10 ⁻¹²
Hecto	h	100-10 ²			
Deca	dk	10-10			
Deci	d	0.1-10 ⁻¹			
Centi	c	0.01-10 ⁻²			

Example: 1000 meters (or 10³ meters) is called a kilometer--and one millionth of a gram (or 10⁻⁶ gram) is called a microgram. 1 millionth of a meter is called a micron and is abbreviated simply u.
 Pico = micromicro = one-trillionth
 Nano = millimicro = one-billionth