

12 GENERAL REFERENCE TABLES

TIME ZONES

City	Z	City	Z
United States		New York, New York	-5
Albuquerque, N.Mexico	-7	Oklahoma City, Oklahoma	-6
Anchorage, Alaska	-9	Omaha, Nebraska	-6
Atlanta, Georgia	-5	Pensacola, Florida	-6
Baltimore, Maryland	-5	Philadelphia, Pennsylvania	-5
Bangor, Maine	-5	Phoenix, Arizona	-7
Bismarck, North Dakota	-6	Pittsburgh, Pennsylvania	-5
Boise, Idaho	-7	Portland, Maine	-5
Boston, Massachusetts	-5	Portland, Oregon	-8
Buffalo, New York	-5	Rochester, New York	-5
Charleston, West Virginia	-5	Salt Lake City, Utah	-7
Chesapeake, Virginia	-5	San Diego, California	-8
Cheyenne, Wyoming	-7	San Francisco, California	-8
Chicago, Illinois	-6	Sault St Marie, Michigan	-5
Cincinnati, Ohio	-5	Savannah, Georgia	-5
Cleveland, Ohio	-5	Seattle, Washington	-8
Dallas, Texas	-6	Sioux Falls, South Dakota	-6
Denver, Colorado	-7	St Louis, Missouri	-6
Des Moines, Iowa	-6	Toledo, Ohio	-5
Detroit, Michigan	-5	Tucson, Arizona	-7
Duluth, Wisconsin	-6	Washington, D.C.	-5
Erie, Pennsylvania	-5	Wichita, Kansas	-6
Honolulu, Hawaii	-10	Canada	
Houston, Texas	-6	Calgary, Alberta	-7
Indianapolis, Indiana	-5	Charlottetown, P.E.I.	-4
Jackson, Mississippi	-6	Edmonton, Alberta	-7
Jacksonville, Florida	-5	Halifax, Nova Scotia	-4
Juneau, Alaska	-9	Kingston, Ontario	-5
Kansas City, Missouri	-6	Montreal, Quebec	-5
Las Vegas, Nevada	-8	Port Colbourne, Ontario	-5
Little Rock, Arkansas	-6	Quebec, Quebec	-5
Los Angeles, California	-8	Regina, Saskatchewan	-6
Louisville, Kentucky	-5	Saint John, New Brunswick	-4
Memphis, Tennessee	-6	St John's, Newfoundland	-3.5
Miami, Florida	-5	Thunder Bay, Ontario	-5
Milwaukee, Wisconsin	-6	Toronto, Ontario	-5
Minneapolis, Minnesota	-6	Vancouver, British Columbia	-8
Mobile, Alabama	-6	Victoria, British Columbia	-8
New Orleans, Louisiana	-6	Winnipeg, Manitoba	-6

(-) = subtract from UTC, (+) = add to UTC, to get local time

TABLE 12-1: United States And Canada Standard Time Differences from UTC. For Daylight Savings Add 1 Hour

City	Z	City	Z
Acapulco, Mexico	-6	Marseille, France	1
Alexandria, Egypt	2	Mazatlan, Mexico	-7
Algiers, Algeria	1	Melbourne, Australia	10
Amsterdam, Netherlands	1	Mexico City, Mexico	-6
Athens, Greece	2	Montevideo, Uruguay	-3
Auckland, New Zealand	12	Moscow, Russia	3
Barcelona, Spain	1	Naples, Italy	1
Basseterre, St Kitts	-4	Nassau, Bahamas	-5
Basse-Terre, Guadeloupe	-4	Nicosia, Cyprus	2
Beirut, Lebanon	2	Odessa, Ukraine	2
Belfast, N. Ireland	0	Oranjestad, Aruba	-4
Berlin, Germany	1	Oslo, Norway	1
Bombay, India	5.5	Palermo, Sicily	1
Bridgetown, Barbadoes	-4	Panama City, Panama	-5
Brussels, Belgium	1	Paris, France	1
Buenos Aires, Argentina	-3	Perth, Australia	8
Calais, France	1	Port of Spain, Trinidad	-4
Cancun, Mexico	-6	Port Said, Suez Canal	2
Cape Horn, Argentina	-3	Port-au-Prince, Haiti	-5
CapeTown, South Africa	2	Puntarenas, Costa Rica	-6
Caracas, Venezuela	-4	Rio De Janeiro, Brazil	-3
Copenhagen, Denmark	1	Rome, Italy	1
Dublin, Ireland	0	San Juan, Puerto Rico	-4
Edinburgh, Scotland	0	Santiago, Chile	-4
Ensenada, Mexico	-8	Seoul, South Korea	9
Fort-de-France, Martinique	-4	Singapore, Singapore	8
Genoa, Italy	1	St George's, Grenada	-5
Georgetown, Cayman Islands	-5	St Thomas, USVI	-4
Gibraltar, Gibraltar	1	St. John's, Antigua	-4
Hamilton, Bermuda	-4	Stockholm, Sweden	1
Havana, Cuba	-5	Suva, Fiji Islands	12
Hong Kong, China	8	Sydney, Australia	10
Istanbul, Turkey	2	Tel Aviv, Israel	2
Kingston, Jamaica	-5	Tokyo, Japan	9
Kingstown, St. Vincent	-4	Tortola, BVI	-4
Kralendijk, Bonaire	-4	Tripoli, Libya	2
Lima, Peru	-5	Valparaiso, Chile	-4
Lisbon, Portugal	0	Venice, Italy	1
London, England	0	Vienna, Austria	1
London, England	0	Vladivostok, Russia	10
Madrid, Spain	1	Wellington, New Zealand	12
Manila, Philippines	8	Willemstad, Curacao	-4
Maracaibo, Venezuela	-4	Zurich, Switzerland	1

(-) = subtract from UTC, (+) = add to UTC, to get local time

TABLE 12-2: World Cities Standard Time Differences from UTC. For Daylight Savings Add 1 Hour

NATIONAL HOLIDAYS**United States Holidays**

Federal holidays in the United States are observed by all federal offices including the post office. Most of the individual states have adopted these as legal state holidays. In addition, most states have one or more state specific holidays in addition to those shown in the table.

Holiday	Date
New Year's Day	1-Jan
Martin Luther King Day	3rd Monday in January
President's Day	3rd Monday in February
Good Friday	Friday before Easter
Easter	Sunday as defined by explanation in note 1 below. Next 8 years are: 16Apr06 08Apr07 23Mar08 12Apr09 04Apr10 24Apr11 08Apr12 31Mar13
Memorial Day	Last Monday in May
Independence Day	4-Jul
Labor Day	1st Monday in September
Columbus Day	2nd Monday in October
Veteran's Day	11-Nov
Thanksgiving Day	4th Thursday in November
Christmas Day	December 25th

1. Easter falls on the 1st Sunday following the 1st ecclesiastical full moon that occurs on or after the day of the vernal equinox which is March 21st. Note that the ecclesiastical full moon is determined from tables and is not always exactly equal to the astronomical full moon. Easter always occurs between March 22 and April 25.

TABLE 12-3: U. S. Holidays

Canadian Holidays

The following table lists Canadian holidays at the national level. Individual provinces will have at least one additional holiday, most of which are scheduled during August.

Holiday	Date
New Year's Day	1-Jan
Good Friday	Friday before Easter
Easter	(See Easter for the U.S. Above)
Victoria Day	Monday preceding May 25
Canada Day	July 1. July 2 if July 1 is a Sunday
Labor Day	1st Monday of September
Thanksgiving Day	2nd Monday of October
Remembrance Day	11-Nov
Christmas	25-Dec
Boxing Day	26-Dec

TABLE 12-4: Canadian Holidays

AIR AND WATER VERSUS ELEVATION

Elevation		Pressure			H2O Boil Temp.	
(ft)	(m)	(psi)	(mbar)	(in Hg)	(°F)	(°C)
0	0	14.70	1013.2	29.92	212.0	100.0
100	30	14.64	1009.6	29.81	211.8	99.9
200	61	14.59	1005.9	29.71	211.7	99.8
300	91	14.54	1002.3	29.60	211.5	99.7
400	122	14.48	998.7	29.49	211.3	99.6
500	152	14.43	995.1	29.38	211.1	99.5
600	183	14.38	991.5	29.28	210.9	99.4
700	213	14.33	987.9	29.17	210.8	99.3
800	244	14.28	984.3	29.07	210.6	99.2
900	274	14.22	980.7	28.96	210.4	99.1
1000	305	14.17	977.2	28.86	210.2	99.0
1200	366	14.07	970.1	28.65	209.9	98.8
1400	427	13.97	963.0	28.44	209.5	98.6
1600	488	13.87	956.0	28.23	209.2	98.4
1800	549	13.76	949.0	28.03	208.8	98.2
2000	610	13.66	942.1	27.82	208.4	98.0
2500	762	13.42	925.0	27.31	207.5	97.5
3000	914	13.17	908.1	26.82	206.6	97.0
3500	1067	12.93	891.5	26.33	205.7	96.5
4000	1219	12.69	875.1	25.84	204.8	96.0
4500	1372	12.46	859.0	25.37	203.9	95.5
5000	1524	12.23	843.1	24.90	203.0	95.0
5500	1676	12.00	827.4	24.43	202.0	94.5
6000	1829	11.78	812.0	23.98	201.1	94.0
6500	1981	11.56	796.8	23.53	200.2	93.4
7000	2134	11.34	781.9	23.09	199.3	92.9
7500	2286	11.13	767.1	22.65	198.3	92.4
8000	2438	10.92	752.6	22.23	197.4	91.9
8500	2591	10.71	738.3	21.80	196.4	91.4
9000	2743	10.50	724.3	21.39	195.5	90.8
9500	2896	10.30	710.4	20.98	194.6	90.3
10000	3048	10.11	696.8	20.58	193.6	89.8
10500	3200	9.91	683.4	20.18	192.6	89.2
11000	3353	9.72	670.2	19.79	191.7	88.7
11500	3505	9.53	657.2	19.41	190.7	88.2
12000	3658	9.35	644.4	19.03	189.8	87.6
12500	3810	9.16	631.8	18.66	188.8	87.1
13000	3962	8.98	619.4	18.29	187.8	86.6
13500	4115	8.81	607.2	17.93	186.8	86.0
14000	4267	8.63	595.2	17.58	185.9	85.5

TABLE 12-5: Characteristics of Air and Pure Water Versus Elevation

SOUND DECIBEL RATINGS

Description of Sound	Deci-bels	Description of Sound	Deci-bels
Perforated eardrum	160	Hair dryer	75
30M from jet aircraft	140	Quiet car interior at 60mph	70
Gunshot	135	Easy listening music background	
Pain threshold	130	Noisy	60
Diesel engine -loud		Normal human voice at 5 feet	
Almost intolerable	120	Dishwasher	55
Rock band		Electric shaver	
Chainsaw	110	Sewing machine	50
Auto horn		Clearly audible	
Circular saw at operator		Quiet conversation	
Chainsaw at operator		Library	45
Rock concert	105	Subdued	40
Extremely noisy	100	Whisper	
Disco		Average residence	30
Diesel engine —quiet	85	Quiet bedroom at night	
Osha mandated hearing protection		Extremely quiet	
Lawn mower		Personal computer	25
Noisy restaurant		Whispering at 5 feet	20
Bus interior	Barely audible		
Very noisy	80	Background in tv studio	15
Side of busy road		Ambient background wilderness	10
Vacuum cleaner		Quiet recording studio	
Heavy traffic	75	Rustling leaves	0
Flush toilet		Threshold of hearing	

TABLE 12-6: Loudness of Typical Sounds in Decibels

Duration of Exposure (hrs/day)	Sound Level (dB)	Duration of Exposure (hrs/day)	Sound Level (dB)
16	85	1	105
8	90	1/2	110
4	95	1/4	115*
2	100	1/8	—

TABLE 12-7: OSHA Allowable Exposure Times Without Ear Protection for Various Sound Levels

* No exposure to noise in excess of 115 dB is allowed.

BLOOD ALCOHOL PERCENTAGES

Weight		Standard Drinks											
		1	2	3	4	5	6	7	8	9	10	11	12
lbs	kg	Blood Alcohol Percent (Male)											
100	45	0.04	0.07	0.11	0.14	0.18	0.21	0.25	0.29	0.32	0.36	0.39	0.43
110	50	0.03	0.07	0.10	0.13	0.16	0.20	0.23	0.26	0.29	0.33	0.36	0.39
120	54	0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.27	0.30	0.33	0.36
130	59	0.03	0.06	0.08	0.11	0.14	0.17	0.19	0.22	0.25	0.28	0.30	0.33
140	64	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23	0.26	0.28	0.31
150	68	0.02	0.05	0.07	0.10	0.12	0.14	0.17	0.19	0.21	0.24	0.26	0.29
160	73	0.02	0.04	0.07	0.09	0.11	0.13	0.16	0.18	0.20	0.22	0.25	0.27
170	77	0.02	0.04	0.06	0.08	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.25
180	82	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24
190	86	0.02	0.04	0.06	0.08	0.09	0.11	0.13	0.15	0.17	0.19	0.21	0.23
200	91	0.02	0.04	0.05	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.20	0.21
210	95	0.02	0.03	0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.19	0.20
220	100	0.02	0.03	0.05	0.07	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.20
230	104	0.02	0.03	0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.16	0.17	0.19
240	109	0.01	0.03	0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.18
250	113	0.01	0.03	0.04	0.06	0.07	0.09	0.10	0.11	0.13	0.14	0.16	0.17

Weight		Standard Drinks											
		1	2	3	4	5	6	7	8	9	10	11	12
lbs	kg	Blood Alcohol Content (Female)											
90	41	0.05	0.09	0.14	0.19	0.24	0.28	0.33	0.38	0.42	0.47	0.52	0.56
100	45	0.04	0.08	0.13	0.17	0.21	0.25	0.30	0.34	0.38	0.42	0.47	0.51
110	50	0.04	0.08	0.12	0.15	0.19	0.23	0.27	0.31	0.35	0.39	0.42	0.46
120	54	0.04	0.07	0.11	0.14	0.18	0.21	0.25	0.28	0.32	0.35	0.39	0.42
130	59	0.03	0.07	0.10	0.13	0.16	0.20	0.23	0.26	0.29	0.33	0.36	0.39
140	64	0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.27	0.30	0.33	0.36
150	68	0.03	0.06	0.08	0.11	0.14	0.17	0.20	0.23	0.25	0.28	0.31	0.34
160	73	0.03	0.05	0.08	0.11	0.13	0.16	0.19	0.21	0.24	0.26	0.29	0.32
170	77	0.02	0.05	0.07	0.10	0.12	0.15	0.17	0.20	0.22	0.25	0.27	0.30
180	82	0.02	0.05	0.07	0.09	0.12	0.14	0.16	0.19	0.21	0.24	0.26	0.28
190	86	0.02	0.04	0.07	0.09	0.11	0.13	0.16	0.18	0.20	0.22	0.25	0.27
200	91	0.02	0.04	0.06	0.08	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.25
210	95	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24
220	100	0.02	0.04	0.06	0.08	0.10	0.12	0.13	0.15	0.17	0.19	0.21	0.23
230	104	0.02	0.04	0.06	0.07	0.09	0.11	0.13	0.15	0.17	0.18	0.20	0.22
240	109	0.02	0.04	0.05	0.07	0.09	0.11	0.12	0.14	0.16	0.18	0.19	0.21

TABLE 12-8: Blood Alcohol Percent Versus Number of Drinks

Table 12-8 provides only a rough estimate of blood alcohol content since metabolism and other factors vary substantially from one individual to the other. The table is based on information from the National Highway Traffic Safety Administration (NHTSA).

The body metabolizes alcohol in the range of 0.10 to 0.20 percent per hour depending on the individual. This percent times the number of hours over which the alcohol is consumed is deducted from the percent derived from the tables to arrive at an estimated blood alcohol percent at any time.

Note: A standard drink is defined as a drink containing 1/2 ounce of pure alcohol. This would be equivalent to one ounce of 100 proof liquor, or one 5-ounce glass of wine or one 12-ounce beer.

The blood alcohol limit in most states is 0.08 or 0.10 percent and in Canada 0.08. Some states have lesser penalties set at 0.05 percent. Note: the blood alcohol percent is not truly a percentage, but is actually grams of alcohol per 100 milliliters of blood.

BOAT LOAN INTEREST

Table 12-9 on the following two pages show monthly loan payments for a \$1000 loan for terms of 1 to 20 years. To calculate the monthly payment for any boat multiply the cost of the boat in thousands of dollars times the monthly payment from the table.

For example a boat costing 140,000 over 10 years at 6.00% interest would have payments of $140 \times \$11.10 = \1554 per month.

638 Boater's Pocket Reference: Chapter 12

Yrs >	1	2	3	4	5
Interest	monthly payment				
5.00%	85.61	43.87	29.97	23.03	18.87
5.25%	85.72	43.98	30.08	23.14	18.99
5.50%	85.84	44.10	30.20	23.26	19.10
5.75%	85.95	44.21	30.31	23.37	19.22
6.00%	86.07	44.32	30.42	23.49	19.33
6.25%	86.18	44.43	30.54	23.60	19.45
6.50%	86.30	44.55	30.65	23.71	19.57
6.75%	86.41	44.66	30.76	23.83	19.68
7.00%	86.53	44.77	30.88	23.95	19.80
7.25%	86.64	44.89	30.99	24.06	19.92
7.50%	86.76	45.00	31.11	24.18	20.04
7.75%	86.87	45.11	31.22	24.30	20.16
8.00%	86.99	45.23	31.34	24.41	20.28
8.25%	87.10	45.34	31.45	24.53	20.40
8.50%	87.22	45.46	31.57	24.65	20.52
8.75%	87.34	45.57	31.68	24.77	20.64
9.00%	87.45	45.68	31.80	24.89	20.76
9.25%	87.57	45.80	31.92	25.00	20.88
9.50%	87.68	45.91	32.03	25.12	21.00
9.75%	87.80	46.03	32.15	25.24	21.12
10.00%	87.92	46.14	32.27	25.36	21.25
Yrs >	6	7	8	9	10
Interest	monthly payment				
5.00%	16.10	14.13	12.66	11.52	10.61
5.25%	16.22	14.25	12.78	11.64	10.73
5.50%	16.34	14.37	12.90	11.76	10.85
5.75%	16.46	14.49	13.02	11.88	10.98
6.00%	16.57	14.61	13.14	12.01	11.10
6.25%	16.69	14.73	13.26	12.13	11.23
6.50%	16.81	14.85	13.39	12.25	11.35
6.75%	16.93	14.97	13.51	12.38	11.48
7.00%	17.05	15.09	13.63	12.51	11.61
7.25%	17.17	15.22	13.76	12.63	11.74
7.50%	17.29	15.34	13.88	12.76	11.87
7.75%	17.41	15.46	14.01	12.89	12.00
8.00%	17.53	15.59	14.14	13.02	12.13
8.25%	17.66	15.71	14.26	13.15	12.27
8.50%	17.78	15.84	14.39	13.28	12.40
8.75%	17.90	15.96	14.52	13.41	12.53
9.00%	18.03	16.09	14.65	13.54	12.67
9.25%	18.15	16.22	14.78	13.68	12.80
9.50%	18.27	16.34	14.91	13.81	12.94
9.75%	18.40	16.47	15.04	13.94	13.08
10.00%	18.53	16.60	15.17	14.08	13.22
Payment is for \$1000 loan principal					

TABLE 12-9(1): Loan Payments Table

Yrs >	11	12	13	14	15
Interest	monthly payment				
5.00%	9.86	9.25	8.73	8.29	7.91
5.25%	9.99	9.37	8.86	8.42	8.04
5.50%	10.11	9.50	8.99	8.55	8.17
5.75%	10.24	9.63	9.12	8.68	8.30
6.00%	10.37	9.76	9.25	8.81	8.44
6.25%	10.49	9.89	9.38	8.95	8.57
6.50%	10.62	10.02	9.51	9.08	8.71
6.75%	10.75	10.15	9.65	9.22	8.85
7.00%	10.88	10.28	9.78	9.35	8.99
7.25%	11.02	10.42	9.92	9.49	9.13
7.50%	11.15	10.55	10.05	9.63	9.27
7.75%	11.28	10.69	10.19	9.77	9.41
8.00%	11.42	10.82	10.33	9.91	9.56
8.25%	11.55	10.96	10.47	10.06	9.70
8.50%	11.69	11.10	10.61	10.20	9.85
8.75%	11.82	11.24	10.75	10.34	9.99
9.00%	11.96	11.38	10.90	10.49	10.14
9.25%	12.10	11.52	11.04	10.64	10.29
9.50%	12.24	11.66	11.19	10.78	10.44
9.75%	12.38	11.81	11.33	10.93	10.59
10.00%	12.52	11.95	11.48	11.08	10.75
Yrs >	16	17	18	19	20
Interest	monthly payment				
5.00%	7.58	7.29	7.03	6.80	6.60
5.25%	7.71	7.42	7.17	6.94	6.74
5.50%	7.84	7.56	7.30	7.08	6.88
5.75%	7.98	7.69	7.44	7.22	7.02
6.00%	8.11	7.83	7.58	7.36	7.16
6.25%	8.25	7.97	7.72	7.50	7.31
6.50%	8.39	8.11	7.87	7.65	7.46
6.75%	8.53	8.25	8.01	7.79	7.60
7.00%	8.67	8.40	8.16	7.94	7.75
7.25%	8.81	8.54	8.30	8.09	7.90
7.50%	8.96	8.69	8.45	8.24	8.06
7.75%	9.10	8.83	8.60	8.39	8.21
8.00%	9.25	8.98	8.75	8.55	8.36
8.25%	9.40	9.13	8.90	8.70	8.52
8.50%	9.54	9.28	9.05	8.85	8.68
8.75%	9.69	9.43	9.21	9.01	8.84
9.00%	9.85	9.59	9.36	9.17	9.00
9.25%	10.00	9.74	9.52	9.33	9.16
9.50%	10.15	9.90	9.68	9.49	9.32
9.75%	10.30	10.05	9.84	9.65	9.49
10.00%	10.46	10.21	10.00	9.81	9.65
Payment is for \$1000 loan principal					

TABLE 12-9(2): Loan Payments Table

CURRENCY CONVERSION TABLE

Some exchange rates are very volatile; use these exchange rates only as a general guide. Tables are current as of December 2006.

To convert from any of the five currencies across the top, to any of the currencies down the left side; move down the column of the "from" currency to the row of the "to" currency and read the multiplier there.

For example, to convert from \$50.00 USD to CAD, multiply by 1.13 to get \$56.50 CAD.

Comments regarding currency exchange:

- To convert in the opposite direction, from currencies in the left column to currencies across the top; divide (instead of multiply) by the value in the intersecting cell. For example, to convert from \$50.00 AUD to USD, divide by 1.28 to get \$39.06.
- The Euro is the currency used in the Euro zone countries, which include Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain. For this reason, most of these countries are not listed in the currency conversion table.
- Up-to-date rate conversions can be found at many web sites, including the following (a Google search will find plenty of others): <http://www.oanda.com/>

From →	USD	CAD	GBP	EUR	JPY
To ↓	Multiply By				
U.S. \$ (USD)	1	0.882	1.95	1.32	0.0086
Canada \$ (CAD)	1.13	1	2.21	1.49	0.0098
British Pound (GBP)	0.51	0.45	1	0.68	0.0044
Euro (EUR)	0.76	0.67	1.48	1	0.0065
Japan Yen (JPY)	116	102	226	153	1
Argentine Peso	3.07	2.71	5.99	4.05	0.026
Australia \$ (AUD)	1.28	1.13	2.49	1.68	0.011
Bahamian Dollar	0.99	0.87	1.90	1.30	0.0085
Barbados Dollar	1.97	1.74	3.84	2.60	0.017
Belize Dollar	1.88	1.66	3.66	2.47	0.016
Bermudian Dollar	0.99	0.87	1.93	1.30	0.0085
Brazilian Real	2.18	1.92	4.24	2.87	0.019
Cayman Islands \$	0.82	0.72	1.59	1.08	0.007
Chilean Peso	529	466	1030	697	4.56
Chinese Yuan	7.82	6.87	15.29	10.32	0.0674
Costa Rican Colon	498	439	971	656	4.29
Cuban Peso	22.2	19.6	43.3	29.3	0.19
Danish Krone	5.66	4.99	11.00	7.45	0.049
Ecuador Sucre	25000	21950	48850	32980	215
Egyptian Pound	5.66	4.99	11.00	7.45	0.049
El Salvador Colon	8.38	7.39	16.30	11.00	0.072
Fiji Dollar	1.67	1.47	3.25	2.20	0.014
Gibraltar Pound	0.51	0.45	1.00	0.68	0.0044
Hong Kong \$	7.78	6.83	15.20	10.28	0.0670
Iceland Krona	69	61	134	91	0.59
Israeli New Shekel	4.26	3.76	8.31	5.61	0.037
Jamaican Dollar	66.7	58.8	130	87.90	0.575
Kuwaiti Dinar	0.29	0.25	0.56	0.38	0.0025
Mexican Peso	11.00	9.70	21.00	15.00	0.0949
New Zealand Dollar	1.47	1.30	2.87	1.94	0.0127
Norwegian Kroner	6.27	5.53	12.20	8.27	0.0541
Panamanian Balboa	0.97	0.85	1.88	1.27	0.0083
Paraguay Guarani	5180	4570	10100	6830	44.7
Peruvian Nuevo Sol	3.19	2.81	6.22	4.20	0.0275
Philippine Peso	49	43	97	65	0.428
Russian Rouble	26	23	51	35	0.227
Saudi Riyal	3.75	3.31	7.31	4.94	0.323
Singapore Dollar	1.55	1.36	3.01	2.04	0.0133
South African Rand	7.12	6.28	13.90	9.38	0.0614
Swiss Franc	1.21	1.06	2.35	1.59	0.0104
Korean Won	921	912	1800	1210	7.94
Sri Lanka Rupee	108	95	210	142	0.93
Swedish Krona	6.90	6.08	13.50	9.08	0.0594
Taiwan Dollar	32.50	28.70	63.40	42.80	0.28
Trinidad/Tobago Dollar	6.15	5.42	12.00	8.10	0.053
Venezuelan Bolivar	2150	1890	4190	2830	18.5
Vietnamese Dong	15800	14000	30900	20900	136

TABLE 12-10: Currency Conversions (December 2006)

NUMBERED DAYS OF THE YEAR

1-Jan 1	2-Jan 2	3-Jan 3	4-Jan 4	5-Jan 5
6-Jan 6	7-Jan 7	8-Jan 8	9-Jan 9	10-Jan 10
11-Jan 11	12-Jan 12	13-Jan 13	14-Jan 14	15-Jan 15
16-Jan 16	17-Jan 17	18-Jan 18	19-Jan 19	20-Jan 20
21-Jan 21	22-Jan 22	23-Jan 23	24-Jan 24	25-Jan 25
26-Jan 26	27-Jan 27	28-Jan 28	29-Jan 29	30-Jan 30
31-Jan 31	1-Feb 32	2-Feb 33	3-Feb 34	4-Feb 35
5-Feb 36	6-Feb 37	7-Feb 38	8-Feb 39	9-Feb 40
10-Feb 41	11-Feb 42	12-Feb 43	13-Feb 44	14-Feb 45
15-Feb 46	16-Feb 47	17-Feb 48	18-Feb 49	19-Feb 50
20-Feb 51	21-Feb 52	22-Feb 53	23-Feb 54	24-Feb 55
25-Feb 56	26-Feb 57	27-Feb 58	28-Feb 59	1-Mar 60
2-Mar 61	3-Mar 62	4-Mar 63	5-Mar 64	6-Mar 65
7-Mar 66	8-Mar 67	9-Mar 68	10-Mar 69	11-Mar 70
12-Mar 71	13-Mar 72	14-Mar 73	15-Mar 74	16-Mar 75
17-Mar 76	18-Mar 77	19-Mar 78	20-Mar 79	21-Mar 80
22-Mar 81	23-Mar 82	24-Mar 83	25-Mar 84	26-Mar 85
27-Mar 86	28-Mar 87	29-Mar 88	30-Mar 89	31-Mar 90
1-Apr 91	2-Apr 92	3-Apr 93	4-Apr 94	5-Apr 95
6-Apr 96	7-Apr 97	8-Apr 98	9-Apr 99	10-Apr 100
11-Apr 101	12-Apr 102	13-Apr 103	14-Apr 104	15-Apr 105
16-Apr 106	17-Apr 107	18-Apr 108	19-Apr 109	20-Apr 110
21-Apr 111	22-Apr 112	23-Apr 113	24-Apr 114	25-Apr 115
26-Apr 116	27-Apr 117	28-Apr 118	29-Apr 119	30-Apr 120
1-May 121	2-May 122	3-May 123	4-May 124	5-May 125
6-May 126	7-May 127	8-May 128	9-May 129	10-May 130
11-May 131	12-May 132	13-May 133	14-May 134	15-May 135
16-May 136	17-May 137	18-May 138	19-May 139	20-May 140
21-May 141	22-May 142	23-May 143	24-May 144	25-May 145
26-May 146	27-May 147	28-May 148	29-May 149	30-May 150
31-May 151	1-Jun 152	2-Jun 153	3-Jun 154	4-Jun 155
5-Jun 156	6-Jun 157	7-Jun 158	8-Jun 159	9-Jun 160
10-Jun 161	11-Jun 162	12-Jun 163	13-Jun 164	14-Jun 165
15-Jun 166	16-Jun 167	17-Jun 168	18-Jun 169	19-Jun 170
20-Jun 171	21-Jun 172	22-Jun 173	23-Jun 174	24-Jun 175
25-Jun 176	26-Jun 177	27-Jun 178	28-Jun 179	29-Jun 180
30-Jun 181				

TABLE 12-11(1): Numbered Days of the Year—Julian Calendar. Leap Years Add One Day After February 28th

	1-Jul 182	2-Jul 183	3-Jul 184	4-Jul 185
5-Jul 186	6-Jul 187	7-Jul 188	8-Jul 189	9-Jul 190
10-Jul 191	11-Jul 192	12-Jul 193	13-Jul 194	14-Jul 195
15-Jul 196	16-Jul 197	17-Jul 198	18-Jul 199	19-Jul 200
20-Jul 201	21-Jul 202	22-Jul 203	23-Jul 204	24-Jul 205
25-Jul 206	26-Jul 207	27-Jul 208	28-Jul 209	29-Jul 210
30-Jul 211	31-Jul 212	1-Aug 213	2-Aug 214	3-Aug 215
4-Aug 216	5-Aug 217	6-Aug 218	7-Aug 219	8-Aug 220
9-Aug 221	10-Aug 222	11-Aug 223	12-Aug 224	13-Aug 225
14-Aug 226	15-Aug 227	16-Aug 228	17-Aug 229	18-Aug 230
19-Aug 231	20-Aug 232	21-Aug 233	22-Aug 234	23-Aug 235
24-Aug 236	25-Aug 237	26-Aug 238	27-Aug 239	28-Aug 240
29-Aug 241	30-Aug 242	31-Aug 243	1-Sep 244	2-Sep 245
3-Sep 246	4-Sep 247	5-Sep 248	6-Sep 249	7-Sep 250
8-Sep 251	9-Sep 252	10-Sep 253	11-Sep 254	12-Sep 255
13-Sep 256	14-Sep 257	15-Sep 258	16-Sep 259	17-Sep 260
18-Sep 261	19-Sep 262	20-Sep 263	21-Sep 264	22-Sep 265
23-Sep 266	24-Sep 267	25-Sep 268	26-Sep 269	27-Sep 270
28-Sep 271	29-Sep 272	30-Sep 273	1-Oct 274	2-Oct 275
3-Oct 276	4-Oct 277	5-Oct 278	6-Oct 279	7-Oct 280
8-Oct 281	9-Oct 282	10-Oct 283	11-Oct 284	12-Oct 285
13-Oct 286	14-Oct 287	15-Oct 288	16-Oct 289	17-Oct 290
18-Oct 291	19-Oct 292	20-Oct 293	21-Oct 294	22-Oct 295
23-Oct 296	24-Oct 297	25-Oct 298	26-Oct 299	27-Oct 300
28-Oct 301	29-Oct 302	30-Oct 303	31-Oct 304	1-Nov 305
2-Nov 306	3-Nov 307	4-Nov 308	5-Nov 309	6-Nov 310
7-Nov 311	8-Nov 312	9-Nov 313	10-Nov 314	11-Nov 315
12-Nov 316	13-Nov 317	14-Nov 318	15-Nov 319	16-Nov 320
17-Nov 321	18-Nov 322	19-Nov 323	20-Nov 324	21-Nov 325
22-Nov 326	23-Nov 327	24-Nov 328	25-Nov 329	26-Nov 330
27-Nov 331	28-Nov 332	29-Nov 333	30-Nov 334	1-Dec 335
2-Dec 336	3-Dec 337	4-Dec 338	5-Dec 339	6-Dec 340
7-Dec 341	8-Dec 342	9-Dec 343	10-Dec 344	11-Dec 345
12-Dec 346	13-Dec 347	14-Dec 348	15-Dec 349	16-Dec 350
17-Dec 351	18-Dec 352	19-Dec 353	20-Dec 354	21-Dec 355
22-Dec 356	23-Dec 357	24-Dec 358	25-Dec 359	26-Dec 360
27-Dec 361	28-Dec 362	29-Dec 363	30-Dec 364	31-Dec 365

TABLE 12-11(2): Numbered Days of the Year—Julian Calendar. Leap Years Add One Day After February 28th

MEASUREMENT CONVERSION TABLES

INCH FRACTIONS TO DECIMAL INCHES AND MILLIMETERS

Inches			mm	Inches			mm
1/64	Fract	Decimal		1/64	Fract	Decimal	
1		0.015625	0.396875	33		0.515625	13.096875
2	1/32	0.03125	0.79375	34	17/32	0.53125	13.49375
3		0.046875	1.190625	35		0.546875	13.890625
4	1/16	0.0625	1.5875	36	9/16	0.5625	14.2875
5		0.078125	1.984375	37		0.578125	14.684375
6	3/32	0.09375	2.38125	38	19/32	0.59375	15.08125
7		0.109375	2.778125	39		0.609375	15.478125
8	1/8	0.125	3.175	40	5/8	0.625	15.875
9		0.140625	3.571875	41		0.640625	16.271875
10	5/32	0.15625	3.96875	42	21/32	0.65625	16.66875
11		0.171875	4.365625	43		0.671875	17.065625
12	3/16	0.1875	4.7625	44	11/16	0.6875	17.4625
13		0.203125	5.159375	45		0.703125	17.859375
14	7/32	0.21875	5.55625	46	23/32	0.71875	18.25625
15		0.234375	5.953125	47		0.734375	18.653125
16	1/4	0.25	6.35	48	3/4	0.75	19.05
17		0.265625	6.746875	49		0.765625	19.446875
18	9/32	0.28125	7.14375	50	25/32	0.78125	19.84375
19		0.296875	7.540625	51		0.796875	20.240625
20	5/16	0.3125	7.9375	52	13/16	0.8125	20.6375
21		0.328125	8.334375	53		0.828125	21.034375
22	11/32	0.34375	8.73125	54	27/32	0.84375	21.43125
23		0.359375	9.128125	55		0.859375	21.828125
24	3/8	0.375	9.525	56	7/8	0.875	22.225
25		0.390625	9.921875	57		0.890625	22.621875
26	13/32	0.40625	10.31875	58	29/32	0.90625	23.01875
27		0.421875	10.715625	59		0.921875	23.415625
28	7/16	0.4375	11.1125	60	15/16	0.9375	23.8125
29		0.453125	11.509375	61		0.953125	24.209375
30	15/32	0.46875	11.90625	62	31/32	0.96875	24.60625
31		0.484375	12.303125	63		0.984375	25.003125
32	1/2	0.5	12.7	64	1	1	25.4

TABLE 12-12: Convert Fractions to Decimal

Dec	64	32	16	8	4	Dec	64	32	16	8	4
0.01		0/32				0.51	33/64	16/32			
0.02	1/64		0/16			0.52			8/16		
0.03	2/64	1/32		0/8		0.53	34/64	17/32		4/8	
0.04	3/64					0.54	35/64				
0.05						0.55					
0.06	4/64	2/32	1/16		0/4	0.56	36/64	18/32	9/16		2/4
0.07						0.57					
0.08	5/64					0.58	37/64				
0.09	6/64	3/32				0.59		19/32			
0.10						0.6	38/64				
0.11	7/64					0.61	39/64				
0.12	8/64	4/32	2/16	1/8		0.62	40/64	20/32	10/16	5/8	
0.13						0.63					
0.14	9/64					0.64	41/64				
0.15	10/64	5/32				0.65					
0.16						0.66	42/64	21/32			
0.17	11/64					0.67	43/64				
0.18	12/64	6/32	3/16			0.68	44/64	22/32	11/16		
0.19						0.69					
0.20	13/64					0.70	45/64				
0.21	14/64	7/32				0.71					
0.22						0.72	46/64	23/32			
0.23	15/64					0.73					
0.24						0.74	47/64				
0.25	16/64	8/32	4/16	2/8	1/4	0.75	48/64	24/32	12/16	6/8	3/4
0.26	17/64					0.76					
0.27						0.77	49/64				
0.28	18/64	9/32				0.78	50/64	25/32			
0.29	19/64					0.79					
0.30						0.8	51/64				
0.31	20/64	10/32	5/16			0.81	52/64	26/32	13/16		
0.32						0.82					
0.33	21/64					0.83	53/64				
0.34	22/64	11/32				0.84		27/32			
0.35						0.85	54/64				
0.36	23/64					0.86	55/64				
0.37	24/64	12/32	6/16	3/8		0.87	56/64	28/32	14/16	7/8	
0.38						0.88					
0.39	25/64					0.89	57/64				
0.40	26/64	13/32				0.9					
0.41						0.91	58/64	29/32			
0.42	27/64					0.92					
0.43			7/16		2/4	0.93	60/64	30/32	15/16		4/4
0.44	28/64	14/32				0.94					
0.45						0.95	61/64				
0.46	29/64					0.96					
0.47	30/64	15/32		4/8		0.97	62/64	31/32		8/8	
0.48	31/64		8/16			0.98			16/16		
0.49						0.99	63/64				
0.50	32/64	16/32				1	64/64	32/32			

TABLE 12-13: Convert Decimal Inches to Fractions

Inch	0	1	2	3	4	5
0	0.0000	0.0833	0.1667	0.2500	0.3333	0.4167
1/32	0.0026	0.0859	0.1693	0.2526	0.3359	0.4193
1/16	0.0052	0.0885	0.1719	0.2552	0.3385	0.4219
3/32	0.0078	0.0911	0.1745	0.2578	0.3411	0.4245
1/8	0.0104	0.0938	0.1771	0.2604	0.3438	0.4271
5/32	0.0130	0.0964	0.1797	0.2630	0.3464	0.4297
3/16	0.0156	0.0990	0.1823	0.2656	0.3490	0.4323
7/32	0.0182	0.1016	0.1849	0.2682	0.3516	0.4349
1/4	0.0208	0.1042	0.1875	0.2708	0.3542	0.4375
9/32	0.0234	0.1068	0.1901	0.2734	0.3568	0.4401
5/16	0.0260	0.1094	0.1927	0.2760	0.3594	0.4427
11/32	0.0286	0.1120	0.1953	0.2786	0.3620	0.4453
3/8	0.0313	0.1146	0.1979	0.2813	0.3646	0.4479
13/32	0.0339	0.1172	0.2005	0.2839	0.3672	0.4505
7/16	0.0365	0.1198	0.2031	0.2865	0.3698	0.4531
15/32	0.0391	0.1224	0.2057	0.2891	0.3724	0.4557
1/2	0.0417	0.1250	0.2083	0.2917	0.3750	0.4583
17/32	0.0443	0.1276	0.2109	0.2943	0.3776	0.4609
9/16	0.0469	0.1302	0.2135	0.2969	0.3802	0.4635
19/32	0.0495	0.1328	0.2161	0.2995	0.3828	0.4661
5/8	0.0521	0.1354	0.2188	0.3021	0.3854	0.4688
21/32	0.0547	0.1380	0.2214	0.3047	0.3880	0.4714
11/16	0.0573	0.1406	0.2240	0.3073	0.3906	0.4740
23/32	0.0599	0.1432	0.2266	0.3099	0.3932	0.4766
3/4	0.0625	0.1458	0.2292	0.3125	0.3958	0.4792
25/32	0.0651	0.1484	0.2318	0.3151	0.3984	0.4818
13/16	0.0677	0.1510	0.2344	0.3177	0.4010	0.4844
27/32	0.0703	0.1536	0.2370	0.3203	0.4036	0.4870
7/8	0.0729	0.1563	0.2396	0.3229	0.4063	0.4896
29/32	0.0755	0.1589	0.2422	0.3255	0.4089	0.4922
15/16	0.0781	0.1615	0.2448	0.3281	0.4115	0.4948
31/32	0.0807	0.1641	0.2474	0.3307	0.4141	0.4974

TABLE 12-14(1): Convert Inches and Inch Fractions to Decimal Feet.

Example: 4-3/16 inches = 0.3490 feet

Inch	6	7	8	9	10	11
0	0.5000	0.5833	0.6667	0.7500	0.8333	0.9167
1/32	0.5026	0.5859	0.6693	0.7526	0.8359	0.9193
1/16	0.5052	0.5885	0.6719	0.7552	0.8385	0.9219
3/32	0.5078	0.5911	0.6745	0.7578	0.8411	0.9245
1/8	0.5104	0.5938	0.6771	0.7604	0.8438	0.9271
5/32	0.5130	0.5964	0.6797	0.7630	0.8464	0.9297
3/16	0.5156	0.5990	0.6823	0.7656	0.8490	0.9323
7/32	0.5182	0.6016	0.6849	0.7682	0.8516	0.9349
1/4	0.5208	0.6042	0.6875	0.7708	0.8542	0.9375
9/32	0.5234	0.6068	0.6901	0.7734	0.8568	0.9401
5/16	0.5260	0.6094	0.6927	0.7760	0.8594	0.9427
11/32	0.5286	0.6120	0.6953	0.7786	0.8620	0.9453
3/8	0.5313	0.6146	0.6979	0.7813	0.8646	0.9479
13/32	0.5339	0.6172	0.7005	0.7839	0.8672	0.9505
7/16	0.5365	0.6198	0.7031	0.7865	0.8698	0.9531
15/32	0.5391	0.6224	0.7057	0.7891	0.8724	0.9557
1/2	0.5417	0.6250	0.7083	0.7917	0.8750	0.9583
17/32	0.5443	0.6276	0.7109	0.7943	0.8776	0.9609
9/16	0.5469	0.6302	0.7135	0.7969	0.8802	0.9635
19/32	0.5495	0.6328	0.7161	0.7995	0.8828	0.9661
5/8	0.5521	0.6354	0.7188	0.8021	0.8854	0.9688
21/32	0.5547	0.6380	0.7214	0.8047	0.8880	0.9714
11/16	0.5573	0.6406	0.7240	0.8073	0.8906	0.9740
23/32	0.5599	0.6432	0.7266	0.8099	0.8932	0.9766
3/4	0.5625	0.6458	0.7292	0.8125	0.8958	0.9792
25/32	0.5651	0.6484	0.7318	0.8151	0.8984	0.9818
13/16	0.5677	0.6510	0.7344	0.8177	0.9010	0.9844
27/32	0.5703	0.6536	0.7370	0.8203	0.9036	0.9870
7/8	0.5729	0.6563	0.7396	0.8229	0.9063	0.9896
29/32	0.5755	0.6589	0.7422	0.8255	0.9089	0.9922
15/16	0.5781	0.6615	0.7448	0.8281	0.9115	0.9948
31/32	0.5807	0.6641	0.7474	0.8307	0.9141	0.9974

TABLE 12-15(2): Convert Inches and Inch Fractions to Decimal Feet

Example: 9-13/16 inches = 0.8177 feet

WEIGHT AND VOLUME OF LIQUIDS**Water Weight and Volume Conversion**

From	To	Multiply By
cu feet H2O		
	gallons (Imperial) H2O	6.2288
	gallons (U.S.) H2O	7.4805
	kilograms H2O	28.317
	liters H2O	28.317
	pounds H2O	62.428
gallons (Imperial) H2O		
	cu feet H2O	0.16054
	gallons (U.S.) H2O	1.2009
	kilograms H2O	4.5461
	liters H2O	4.5461
	pounds H2O	10.022
gallons (U.S.) H2O		
	cu feet H2O	0.13368
	gallons (Imperial) H2O	0.83267
	kilograms H2O	3.7854
	liters H2O	3.7854
	pounds H2O	8.3454
kilograms H2O		
	cu feet H2O	0.035315
	gallons (Imperial) H2O	0.21997
	gallons (U.S.) H2O	0.26417
	liters H2O	1
	pounds H2O	2.2046
liters H2O		
	cu feet H2O	0.035315
	gallons (Imperial) H2O	0.21997
	gallons (U.S.) H2O	0.26417
	kilograms H2O	1
	pounds H2O	2.2046
pounds H2O		
	cu feet H2O	0.016019
	gallons (Imperial) H2O	0.099776
	gallons (U.S.) H2O	0.11983
	kilograms H2O	0.45359
	liters H2O	0.45359

TABLE 12-16: *Weight and Volume of Water*

Seawater Weight and Volume Conversion

From	To	Multiply By
cu feet seawater		
	gallons (Imperial) seawater	6.2288
	gallons (U.S.) seawater	7.4805
	kilograms seawater	29.043
	liters seawater	28.317
	pounds seawater	64.029
gallons (Imperial) seawater		
	cu feet seawater	0.16054
	gallons (U.S.) seawater	1.2009
	kilograms seawater	4.6627
	liters seawater	4.5461
	pounds seawater	10.279
gallons (U.S.) seawater		
	cu feet seawater	0.13368
	gallons (Imperial) seawater	0.83267
	kilograms seawater	3.8825
	liters seawater	3.7854
	pounds seawater	8.5594
kilograms seawater		
	cu feet seawater	0.034432
	gallons (Imperial) seawater	0.21447
	gallons (U.S.) seawater	0.25757
	liters seawater	0.975
	pounds seawater	2.2046
liters seawater		
	cu feet seawater	0.035315
	gallons (Imperial) seawater	0.21997
	gallons (U.S.) seawater	0.26417
	kilograms seawater	1.0256
	pounds seawater	2.2612
pounds seawater		
	cu feet seawater	0.015618
	gallons (Imperial) seawater	0.097282
	gallons (U.S.) seawater	0.11683
	kilograms seawater	0.45359
	liters seawater	0.44225

TABLE 12-17: *Weight and Volume of Seawater*

Diesel Fuel Weight and Volume Conversion

From	To	Multiply By
cu feet diesel		
	gallons (Imperial) diesel	6.2288
	gallons (U.S.) diesel	7.4805
	kilograms diesel	24.069
	liters diesel	28.317
	pounds diesel	53.064
gallons (Imperial) diesel		
	cu feet diesel	0.16054
	gallons (U.S.) diesel	1.2009
	kilograms diesel	3.8642
	liters diesel	4.5461
	pounds diesel	8.5191
gallons (U.S.) diesel		
	cu feet diesel	0.13368
	gallons (Imperial) diesel	0.83267
	kilograms diesel	3.2176
	liters diesel	3.7854
	pounds diesel	7.0936
kilograms diesel		
	cu feet diesel	0.041547
	gallons (Imperial) diesel	0.25879
	gallons (U.S.) diesel	0.31079
	liters diesel	1.1765
	pounds diesel	2.2046
liters diesel		
	cu feet diesel	0.035315
	gallons (Imperial) diesel	0.21997
	gallons (U.S.) diesel	0.26417
	kilograms diesel	0.85
	pounds diesel	1.8739
pounds diesel		
	cu feet diesel	0.018845
	gallons (Imperial) diesel	0.11738
	gallons (U.S.) diesel	0.14097
	kilograms diesel	0.45359
	liters diesel	0.53364

TABLE 12-18: *Weight and Volume of Diesel Fuel*

Gasoline Weight and Volume Conversion

From	To	Multiply By
cu feet gasoline		
	gallons (Imperial) gasoline	6.2288
	gallons (U.S.) gasoline	7.4805
	kilograms gasoline	21.201
	liters gasoline	28.317
	pounds gasoline	46.741
gallons (Imperial) gasoline		
	cu feet gasoline	0.16054
	gallons (U.S.) gasoline	1.2009
	kilograms gasoline	3.4037
	liters gasoline	4.5461
	pounds gasoline	7.504
gallons (U.S.) gasoline		
	cu feet gasoline	0.13368
	gallons (Imperial) gasoline	0.83267
	kilograms gasoline	2.8342
	liters gasoline	3.7854
	pounds gasoline	6.2484
kilograms gasoline		
	cu feet gasoline	0.047167
	gallons (Imperial) gasoline	0.29379
	gallons (U.S.) gasoline	0.35283
	liters gasoline	1.3356
	pounds gasoline	2.2046
liters gasoline		
	cu feet gasoline	0.035315
	gallons (Imperial) gasoline	0.21997
	gallons (U.S.) gasoline	0.26417
	kilograms gasoline	0.74872
	pounds gasoline	1.6506
pounds gasoline		
	cu feet gasoline	0.021395
	gallons (Imperial) gasoline	0.13326
	gallons (U.S.) gasoline	0.16004
	kilograms gasoline	0.45359
	liters gasoline	0.60583

TABLE 12-19: *Weight and Volume of Gasoline*

Gal- Lons	Fuel / Oil Ratio									
	20:1	24:1	28:1	32:1	40:1	50:1	100:1			
1	6.4 oz 190 ml	5.3 oz 160 ml	4.6 oz 140 ml	4 oz 120 ml	3.2 oz 90 ml	2.6 oz 80 ml	1.3 oz 40 ml			
2	13 oz 380 ml	11 oz 330 ml	9 oz 270 ml	8 oz 240 ml	6.4 oz 190 ml	5.1 oz 150 ml	2.6 oz 80 ml			
3	19 oz 560 ml	16 oz 470 ml	14 oz 410 ml	12 oz 350 ml	10 oz 300 ml	7.7 oz 230 ml	3.8 oz 110 ml			
4	26 oz 770 ml	21 oz 620 ml	18 oz 530 ml	16 oz 470 ml	13 oz 380 ml	10 oz 300 ml	5.1 oz 150 ml			
5	1 qt 0.9 l	27 oz 800 ml	23 oz 680 ml	20 oz 590 ml	16 oz 470 ml	13 oz 380 ml	6.4 oz 190 ml			
6	1.2 qt 1.1 l	1 qt 0.9 l	27 oz 800 ml	24 oz 710 ml	19 oz 560 ml	15 oz 440 ml	7.7 oz 230 ml			
7	1.4 qt 1.3 l	1.2 qt 1.1 l	1 qt 0.9 l	28 oz 830 ml	22 oz 650 ml	18 oz 530 ml	9 oz 270 ml			
8	1.6 qt 1.5 l	1.3 qt 1.2 l	1.1 qt 1 l	1 qt 0.9 l	26 oz 770 ml	20 oz 590 ml	10 oz 300 ml			
9	1.8 qt 1.7 l	1.5 qt 1.4 l	1.3 qt 1.2 l	1.1 qt 1 l	29 oz 860 ml	23 oz 680 ml	12 oz 350 ml			
10	2 qt 1.9 l	1.7 qt 1.6 l	1.4 qt 1.3 l	1.3 qt 1.2 l	1 qt 0.9 l	26 oz 770 ml	13 oz 380 ml			
12	2.4 qt 2.3 l	2 qt 1.9 l	1.7 qt 1.6 l	1.5 qt 1.4 l	1.2 qt 1.1 l	31 oz 920 ml	15 oz 440 ml			
14	2.8 qt 2.6 l	2.3 qt 2.2 l	2 qt 1.9 l	1.8 qt 1.7 l	1.4 qt 1.3 l	1.1 qt 1 l	18 oz 530 ml			
16	3.2 qt 3 l	2.7 qt 2.6 l	2.3 qt 2.2 l	2 qt 1.9 l	1.6 qt 1.5 l	1.3 qt 1.2 l	20 oz 590 ml			
18	3.6 qt 3.4 l	3 qt 2.8 l	2.6 qt 2.5 l	2.3 qt 2.2 l	1.8 qt 1.7 l	1.4 qt 1.3 l	23 oz 680 ml			
20	4 qt 3.8 l	3.3 qt 3.1 l	2.9 qt 2.7 l	2.5 qt 2.4 l	2 qt 1.9 l	1.6 qt 1.5 l	26 oz 770 ml			
25	5 qt 4.7 l	4.2 qt 4 l	3.6 qt 3.4 l	3.1 qt 2.9 l	2.5 qt 2.4 l	2 qt 1.9 l	1 qt 0.9 l			
30	6 qt 5.7 l	5 qt 4.7 l	4.3 qt 4.1 l	3.8 qt 3.6 l	3 qt 2.8 l	2.4 qt 2.3 l	1.2 qt 1.1 l			
35	7 qt 6.6 l	5.8 qt 5.5 l	5 qt 4.7 l	4.4 qt 4.2 l	3.5 qt 3.3 l	2.8 qt 2.6 l	1.4 qt 1.3 l			
40	8 qt 7.6 l	6.7 qt 6.3 l	5.7 qt 5.4 l	5 qt 4.7 l	4 qt 3.8 l	3.2 qt 3 l	1.6 qt 1.5 l			
45	9 qt 8.5 l	7.5 qt 7.1 l	6.4 qt 6.1 l	5.6 qt 5.7 l	4.5 qt 4.3 l	3.6 qt 3.4 l	1.8 qt 1.7 l			
50	10 qt 9.5 l	8.3 qt 7.9 l	7.1 qt 6.7 l	6.3 qt 5.7 l	5 qt 4.7 l	4 qt 3.8 l	2 qt 1.9 l			
55	11 qt 10 l	9.2 qt 8.7 l	7.9 qt 7.5 l	6.9 qt 6.6 l	5.5 qt 5.2 l	4.4 qt 4.2 l	2.2 qt 2.1 l			
60	12 qt 11 l	10 qt 9.5 l	8.6 qt 8.1 l	7.5 qt 7.6 l	6 qt 5.7 l	4.8 qt 4.5 l	2.4 qt 2.3 l			
65	13 qt 12 l	11 qt 10 l	9.3 qt 8.8 l	8.1 qt 7.6 l	6.5 qt 6.2 l	5.2 qt 4.9 l	2.6 qt 2.5 l			
70	14 qt 13 l	12 qt 11 l	10 qt 9.5 l	8.8 qt 8.5 l	7 qt 6.6 l	5.6 qt 5.3 l	2.8 qt 2.6 l			
80	16 qt 15 l	13 qt 12 l	11 qt 10 l	9.4 qt 9.5 l	8 qt 7.6 l	6.4 qt 6.1 l	3.2 qt 3 l			
90	18 qt 17 l	15 qt 14 l	13 qt 12 l	11 qt 10 l	9 qt 8.5 l	7.2 qt 6.8 l	3.6 qt 3.4 l			
100	20 qt 19 l	17 qt 16 l	14 qt 13 l	13 qt 12 l	10 qt 9.5 l	8 qt 7.6 l	4 qt 3.8 l			

TABLE 12-20: Fuel/Oil Mixture for 2-Cycle Engines—U.S.

Liters	Fuel / Oil Ratio									
	20:1	24:1	28:1	32:1	40:1	50:1	100:1			
1	50 ml 1.7 oz	42 ml 1.4 oz	36 ml 1.2 oz	31 ml 1 oz	25 ml 0.8 oz	20 ml 0.7 oz	10 ml 0.3 oz			
2	100 ml 3.4 oz	83 ml 2.8 oz	71 ml 2.4 oz	63 ml 2.1 oz	50 ml 1.7 oz	40 ml 1.4 oz	20 ml 0.7 oz			
3	150 ml 5.1 oz	125 ml 4.2 oz	107 ml 3.6 oz	94 ml 3.2 oz	75 ml 2.5 oz	60 ml 2 oz	30 ml 1 oz			
4	200 ml 6.8 oz	167 ml 5.6 oz	143 ml 4.8 oz	125 ml 4.2 oz	100 ml 3.4 oz	80 ml 2.7 oz	40 ml 1.4 oz			
5	250 ml 8.5 oz	208 ml 7 oz	179 ml 6.1 oz	156 ml 5.3 oz	125 ml 4.2 oz	100 ml 3.4 oz	50 ml 1.7 oz			
10	500 ml 17 oz	417 ml 14 oz	357 ml 12 oz	313 ml 11 oz	250 ml 8.5 oz	200 ml 6.8 oz	100 ml 3.4 oz			
15	750 ml 25 oz	625 ml 21 oz	536 ml 18 oz	469 ml 16 oz	375 ml 13 oz	300 ml 10 oz	150 ml 5.1 oz			
20	1 1.1 qt	833 ml 28 oz	714 ml 24 oz	625 ml 21 oz	500 ml 17 oz	400 ml 14 oz	200 ml 6.8 oz			
25	1.31 1.4 qt	1 1.1 qt	893 ml 30 oz	781 ml 26 oz	625 ml 21 oz	500 ml 17 oz	250 ml 8.5 oz			
30	1.51 1.6 qt	1.31 1.4 qt	1.1 1.2 qt	938 ml 32 oz	750 ml 25 oz	600 ml 20 oz	300 ml 10 oz			
35	1.81 1.9 qt	1.51 1.6 qt	1.31 1.4 qt	1.1 1.2 qt	875 ml 30 oz	700 ml 24 oz	350 ml 12 oz			
40	2 2.1 qt	1.71 1.8 qt	1.41 1.5 qt	1.31 1.4 qt	1 1.1 qt	800 ml 27 oz	400 ml 14 oz			
45	2.31 2.4 qt	1.91 2 qt	1.61 1.7 qt	1.41 1.5 qt	1.11 1.2 qt	900 ml 30 oz	450 ml 15 oz			
50	2.51 2.6 qt	2.11 2.2 qt	1.81 1.9 qt	1.61 1.7 qt	1.31 1.4 qt	1 1.1 qt	500 ml 17 oz			
55	2.81 3 qt	2.31 2.4 qt	2 2.1 qt	1.71 1.8 qt	1.41 1.5 qt	1.11 1.2 qt	550 ml 19 oz			
60	31 3.2 qt	2.51 2.6 qt	2.11 2.2 qt	1.91 2 qt	1.51 1.6 qt	1.21 1.3 qt	600 ml 20 oz			
65	3.31 3.5 qt	2.71 2.9 qt	2.31 2.4 qt	2 2.1 qt	1.61 1.7 qt	1.31 1.4 qt	650 ml 22 oz			
70	3.51 3.7 qt	2.91 3.1 qt	2.51 2.6 qt	2.21 2.3 qt	1.81 1.9 qt	1.41 1.5 qt	700 ml 24 oz			
75	3.81 4 qt	3.11 3.3 qt	2.71 2.9 qt	2.31 2.4 qt	1.91 2 qt	1.51 1.6 qt	750 ml 25 oz			
80	41 4.2 qt	3.31 3.5 qt	2.91 3.1 qt	2.51 2.6 qt	2 2.1 qt	1.61 1.7 qt	800 ml 27 oz			
90	4.51 4.8 qt	3.81 4 qt	3.21 3.4 qt	2.81 3 qt	2.31 2.4 qt	1.81 1.9 qt	900 ml 30 oz			
100	51 5.3 qt	4.21 4.4 qt	3.61 3.8 qt	3.11 3.3 qt	2.51 2.6 qt	2 2.1 qt	1 1.1 qt			
150	7.51 7.9 qt	6.31 6.7 qt	5.41 5.7 qt	4.71 5 qt	3.81 4 qt	3 3.2 qt	1.51 1.6 qt			
200	101 11 qt	8.31 8.8 qt	7.11 7.5 qt	6.31 6.7 qt	5 5.3 qt	4 4.2 qt	2 2.1 qt			
250	131 14 qt	101 11 qt	8.91 9.4 qt	7.81 8.2 qt	6.31 6.7 qt	5 5.3 qt	2.51 2.6 qt			
300	151 16 qt	131 14 qt	11 12 qt	9.41 9.9 qt	7.51 7.9 qt	6 6.3 qt	3 3.2 qt			
350	181 19 qt	151 16 qt	131 14 qt	11 12 qt	8.81 9.3 qt	7 7.4 qt	3.51 3.7 qt			
400	201 21 qt	171 18 qt	141 15 qt	131 14 qt	101 11 qt	8 8.5 qt	4 4.2 qt			

TABLE 12-21: Fuel/Oil Mixture for 2-Cycle Engines—Metric

