



*CALCULATOR* / *CHARTS*

*by*

**SUMLOCK COMPTOMETER LIMITED**

39, ST. JAMES'S STREET, LONDON, S.W.1.









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CHART NO. 1

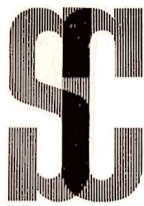
Pence and Farthings as decimals of a Shilling

	0	1	2	3	4	5	6	7	8	9	10	11	
		.083	.16	.25	.3	.416	.5	.583	.6	.75	.83	.916	
¼	.02083	.10416	.1875	.27083	.35416	.4375	.52083	.60416	.6875	.77083	.85416	.9375	¼
½	.0416	.125	.2083	.2916	.375	.4583	.5416	.625	.7083	.7916	.875	.9583	½
¾	.0625	.14583	.22916	.3125	.39583	.47916	.5625	.64583	.72916	.8125	.89583	.97916	¾

Pence and Farthings as decimals of a £

	0	1	2	3	4	5	6	7	8	9	10	11	
		.00416	.0083	.0125	.016	.02083	.025	.02916	.03	.0375	.0416	.04583	
¼	.0010416	.0052083	.009375	.0135416	.0177083	.021875	.0260416	.0302083	.034375	.0385416	.0427083	.046875	¼
½	.002083	.00625	.010416	.014583	.01875	.022916	.027083	.03125	.035416	.039583	.04375	.047916	½
¾	.003125	.0072916	.0114583	.015625	.0197916	.0239583	.028125	.0322916	.0364583	.040625	.0447916	.0489583	¾





## CHART NO. 2

### Shillings and Pence as decimals of a £

Shillings	Pence	1	2	3	4	5	6	7	8	9	10	11	Shillings
		.00416	.0083	.0125	.016	.02083	.025	.02916	.03	.0375	.0416	.04583	0
1	.05	.05416	.0583	.0625	.06	.07083	.075	.07916	.083	.0875	.0916	.09583	1
2	.1	.10416	.1083	.1125	.116	.12083	.125	.12916	.13	.1375	.1416	.14583	2
3	.15	.15416	.1583	.1625	.16	.17083	.175	.17916	.183	.1875	.1916	.19583	3
4	.2	.20416	.2083	.2125	.216	.22083	.225	.22916	.23	.2375	.2416	.24583	4
5	.25	.25416	.2583	.2625	.26	.27083	.275	.27916	.283	.2875	.2916	.29583	5
6	.3	.30416	.3083	.3125	.316	.32083	.325	.32916	.3	.3375	.3416	.34583	6
7	.35	.35416	.3583	.3625	.36	.37083	.375	.37916	.383	.3875	.3916	.39583	7
8	.4	.40416	.4083	.4125	.416	.42083	.425	.42916	.43	.4375	.4416	.44583	8
9	.45	.45416	.4583	.4625	.46	.47083	.475	.47916	.483	.4875	.4916	.49583	9
10	.5	.50416	.5083	.5125	.516	.52083	.525	.52916	.53	.5375	.5416	.54583	10
11	.55	.55416	.5583	.5625	.56	.57083	.575	.57916	.583	.5875	.5916	.59583	11
12	.6	.60416	.6083	.6125	.616	.62083	.625	.62916	.63	.6375	.6416	.64583	12
13	.65	.65416	.6583	.6625	.66	.67083	.675	.67916	.683	.6875	.6916	.69583	13
14	.7	.70416	.7083	.7125	.716	.72083	.725	.72916	.73	.7375	.7416	.74583	14
15	.75	.75416	.7583	.7625	.76	.77083	.775	.77916	.783	.7875	.7916	.79583	15
16	.8	.80416	.8083	.8125	.816	.82083	.825	.82916	.83	.8375	.8416	.84583	16
17	.85	.85416	.8583	.8625	.86	.87083	.875	.87916	.883	.8875	.8916	.89583	17
18	.9	.90416	.9083	.9125	.916	.92083	.925	.92916	.93	.9375	.9416	.94583	18
19	.95	.95416	.9583	.9625	.96	.97083	.975	.97916	.983	.9875	.9916	.99583	19



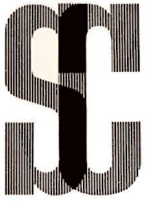


CHART NO. 3

Pence, Eighths and Sixteenths as decimals of a Shilling

Eighths

Pence		$\frac{1}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{7}{8}$
0		.010416	.03125	.052083	.072916
1	.083	.09375	.114583	.135416	.15625
2	.16	.177083	.197916	.21875	.239583
3	.25	.260416	.28125	.302083	.322916
4	.3	.34375	.364583	.385416	.40625
5	.416	.427083	.447916	.46875	.489583
6	.5	.510416	.53125	.552083	.572916
7	.583	.59375	.614583	.635416	.65625
8	.6	.677083	.697916	.71875	.739583
9	.75	.760416	.78125	.802083	.822916
10	.83	.84375	.864583	.885416	.90625
11	.916	.927083	.947916	.96875	.989583

Sixteenths

Pence		$\frac{1}{16}$	$\frac{3}{16}$	$\frac{5}{16}$	$\frac{7}{16}$	$\frac{9}{16}$	$\frac{11}{16}$	$\frac{13}{16}$	$\frac{15}{16}$
0		.005208	.015625	.026042	.036458	.046875	.057292	.067708	.078125
1	.083	.088542	.098958	.109375	.119792	.130208	.140625	.151042	.161458
2	.16	.171875	.182292	.192708	.203125	.213542	.223958	.234375	.244792
3	.25	.265208	.265625	.276042	.286458	.296875	.307292	.317708	.328125
4	.3	.338542	.348958	.359375	.369792	.380208	.390625	.401042	.411458
5	.416	.421875	.432292	.442708	.453125	.463542	.473958	.484375	.494792
6	.5	.505208	.515625	.526042	.536458	.546875	.557292	.567708	.578125
7	.583	.588542	.598958	.609375	.619792	.630208	.640625	.651042	.661458
8	.6	.671875	.682292	.692708	.703125	.713542	.723958	.734375	.744792
9	.75	.765208	.765625	.776042	.786458	.796875	.807292	.817708	.828125
10	.83	.838542	.848958	.859375	.869792	.880208	.890625	.901042	.911458
11	.916	.921875	.932292	.942708	.953125	.963542	.973958	.984375	.994792



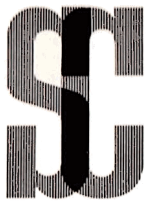


CHART NO. 4

Pence, Eighths and Sixteenths as decimals of a £

Eighths

Pence		$\frac{1}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{7}{8}$
0		.0005208	.0015625	.0026042	.0036458
1	.00416	.0046875	.0057292	.0067708	.0078125
2	.0083	.0088542	.0098958	.0109375	.0119792
3	.0125	.0130208	.0140625	.0151042	.0161458
4	.016	.0171875	.0182292	.0192708	.0203125
5	.02083	.0213542	.0223958	.0234375	.0244792
6	.025	.0255208	.0265625	.0276042	.0286458
7	.02916	.0296875	.0307292	.0317708	.0328125
8	.03	.0338542	.0348958	.0359375	.0369792
9	.0375	.0380208	.0390625	.0401042	.0411458
10	.0416	.0421875	.0432292	.0442708	.0453125
11	.04583	.0463542	.0473958	.0484375	.0494792

Sixteenths

Pence		$\frac{1}{16}$	$\frac{3}{16}$	$\frac{5}{16}$	$\frac{7}{16}$	$\frac{9}{16}$	$\frac{11}{16}$	$\frac{13}{16}$	$\frac{15}{16}$
0		.00026042	.00078125	.00130208	.00182292	.00234375	.00286458	.00338542	.00390625
1	.00416	.00442708	.00494792	.00546875	.00598958	.00651042	.00703125	.00755208	.00807292
2	.0083	.00859375	.00911458	.00963542	.01015625	.01067708	.01119792	.01171875	.01223958
3	.0125	.01276042	.01328125	.01380208	.01432292	.01484375	.01536458	.01588542	.01640625
4	.016	.01692708	.01744792	.01796875	.01848958	.01901042	.01953125	.02005208	.02057292
5	.02083	.02109375	.02161458	.02213542	.02265625	.02317708	.02369792	.02421875	.02473958
6	.025	.02526042	.02578125	.02630208	.02682292	.02734375	.02786458	.02838542	.02890625
7	.02916	.02942708	.02994792	.03046875	.03098958	.03151042	.03203125	.03255208	.03307292
8	.03	.03359375	.03411458	.03463542	.03515625	.03567708	.03619792	.03671875	.03723958
9	.0375	.03776042	.03828125	.03880208	.03932292	.03984375	.04036458	.04088542	.04140625
10	.0416	.04192708	.04244792	.04296875	.04348958	.04401042	.04453125	.04505208	.04557292
11	.04583	.04609375	.04661458	.04713542	.04765625	.04817708	.04869792	.04921875	.04973958



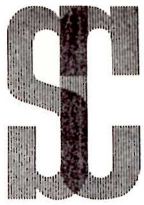


CHART NO. 5

Ors. and Lb. as decimals of a Cwt.

28lb. = 1 qr.  
 4qrs. = 1 cwt.  
 112lb. = 1 cwt.

Lb.	Qrs. Lb.	Decimal	Lb.	Qrs. Lb.	Decimal	Lb.	Qrs. Lb.	Decimal	Lb.	Qrs. Lb.	Decimal
¼	0 - ¼	.004464	28	1 - 0	.25	56	2 - 0	.5	84	3 - 0	.75
1	0 - 1	.008929	29	1 - 1	.258929	57	2 - 1	.508929	85	3 - 1	.758929
2	0 - 2	.017857	30	1 - 2	.267857	58	2 - 2	.517857	86	3 - 2	.767857
3	0 - 3	.026786	31	1 - 3	.276786	59	2 - 3	.526786	87	3 - 3	.776786
4	0 - 4	.035714	32	1 - 4	.285714	60	2 - 4	.535714	88	3 - 4	.785714
5	0 - 5	.044643	33	1 - 5	.294643	61	2 - 5	.544643	89	3 - 5	.794643
6	0 - 6	.053571	34	1 - 6	.303571	62	2 - 6	.553571	90	3 - 6	.803571
7	0 - 7	.0625	35	1 - 7	.3125	63	2 - 7	.5625	91	3 - 7	.8125
8	0 - 8	.071429	36	1 - 8	.321429	64	2 - 8	.571429	92	3 - 8	.821429
9	0 - 9	.080357	37	1 - 9	.330357	65	2 - 9	.580357	93	3 - 9	.830357
10	0 - 10	.089286	38	1 - 10	.339286	66	2 - 10	.589286	94	3 - 10	.839286
11	0 - 11	.098214	39	1 - 11	.348214	67	2 - 11	.598214	95	3 - 11	.848214
12	0 - 12	.107143	40	1 - 12	.357143	68	2 - 12	.607143	96	3 - 12	.857143
13	0 - 13	.116071	41	1 - 13	.366071	69	2 - 13	.616071	97	3 - 13	.866071
14	0 - 14	.125	42	1 - 14	.375	70	2 - 14	.625	98	3 - 14	.875
15	0 - 15	.133929	43	1 - 15	.383929	71	2 - 15	.633929	99	3 - 15	.883929
16	0 - 16	.142857	44	1 - 16	.392857	72	2 - 16	.642857	100	3 - 16	.892857
17	0 - 17	.151786	45	1 - 17	.401786	73	2 - 17	.651786	101	3 - 17	.901786
18	0 - 18	.160714	46	1 - 18	.410714	74	2 - 18	.660714	102	3 - 18	.910714
19	0 - 19	.169643	47	1 - 19	.419643	75	2 - 19	.669643	103	3 - 19	.919643
20	0 - 20	.178571	48	1 - 20	.428571	76	2 - 20	.678571	104	3 - 20	.928571
21	0 - 21	.1875	49	1 - 21	.4375	77	2 - 21	.6875	105	3 - 21	.9375
22	0 - 22	.196429	50	1 - 22	.446429	78	2 - 22	.696429	106	3 - 22	.946429
23	0 - 23	.205357	51	1 - 23	.455357	79	2 - 23	.705357	107	3 - 23	.955357
24	0 - 24	.214286	52	1 - 24	.464286	80	2 - 24	.714286	108	3 - 24	.964286
25	0 - 25	.223214	53	1 - 25	.473214	81	2 - 25	.723214	109	3 - 25	.973214
26	0 - 26	.232143	54	1 - 26	.482143	82	2 - 26	.732143	110	3 - 26	.982143
27	0 - 27	.241071	55	1 - 27	.491071	83	2 - 27	.741071	111	3 - 27	.991071





CHART NO. 6

Qrs. and Lb. as decimals of a Ton

28 lb. = 1 qr.  
 4 qrs. = 1 cwt.  
 20 cwts. = 1 ton  
 2240 lb. = 1 ton

Lb.	Qrs. Lb.	Decimal	Lb.	Qrs. Lb.	Decimal	Lb.	Qrs. Lb.	Decimal	Lb.	Qrs. Lb.	Decimal
¼	0 - ¼	.0002232	28	1 - 0	.0125	56	2 - 0	.025	84	3 - 0	.0375
1	0 - 1	.0004464	29	1 - 1	.0129464	57	2 - 1	.0254464	85	3 - 1	.0379464
2	0 - 2	.0008929	30	1 - 2	.0133929	58	2 - 2	.0258929	86	3 - 2	.0383929
3	0 - 3	.0013393	31	1 - 3	.0138393	59	2 - 3	.0263393	87	3 - 3	.0388393
4	0 - 4	.0017857	32	1 - 4	.0142857	60	2 - 4	.0267857	88	3 - 4	.0392857
5	0 - 5	.0022321	33	1 - 5	.0147321	61	2 - 5	.0272321	89	3 - 5	.0397321
6	0 - 6	.0026786	34	1 - 6	.0151786	62	2 - 6	.0276786	90	3 - 6	.0401786
7	0 - 7	.003125	35	1 - 7	.015625	63	2 - 7	.028125	91	3 - 7	.040625
8	0 - 8	.0035714	36	1 - 8	.0160714	64	2 - 8	.0285714	92	3 - 8	.0410714
9	0 - 9	.0040179	37	1 - 9	.0165179	65	2 - 9	.0290179	93	3 - 9	.0415179
10	0 - 10	.0044643	38	1 - 10	.0169643	66	2 - 10	.0294643	94	3 - 10	.0419643
11	0 - 11	.0049107	39	1 - 11	.0174107	67	2 - 11	.0299107	95	3 - 11	.0424107
12	0 - 12	.0053571	40	1 - 12	.0178571	68	2 - 12	.0303571	96	3 - 12	.0428571
13	0 - 13	.0058036	41	1 - 13	.0183036	69	2 - 13	.0308036	97	3 - 13	.0433036
14	0 - 14	.00625	42	1 - 14	.01875	70	2 - 14	.03125	98	3 - 14	.04375
15	0 - 15	.0066964	43	1 - 15	.0191964	71	2 - 15	.0316964	99	3 - 15	.0441964
16	0 - 16	.0071429	44	1 - 16	.0196429	72	2 - 16	.0321429	100	3 - 16	.0446429
17	0 - 17	.0075893	45	1 - 17	.0200893	73	2 - 17	.0325893	101	3 - 17	.0450893
18	0 - 18	.0080357	46	1 - 18	.0205357	74	2 - 18	.0330357	102	3 - 18	.0455357
19	0 - 19	.0084821	47	1 - 19	.0209821	75	2 - 19	.0334821	103	3 - 19	.0459821
20	0 - 20	.0089286	48	1 - 20	.0214286	76	2 - 20	.0339286	104	3 - 20	.0464286
21	0 - 21	.009375	49	1 - 21	.021875	77	2 - 21	.034375	105	3 - 21	.046875
22	0 - 22	.0098214	50	1 - 22	.0223214	78	2 - 22	.0348214	106	3 - 22	.0473214
23	0 - 23	.0102679	51	1 - 23	.0227679	79	2 - 23	.0352679	107	3 - 23	.0477679
24	0 - 24	.0107143	52	1 - 24	.0232143	80	2 - 24	.0357143	108	3 - 24	.0482143
25	0 - 25	.0111607	53	1 - 25	.0236607	81	2 - 25	.0361607	109	3 - 25	.0486607
26	0 - 26	.0116071	54	1 - 26	.0241071	82	2 - 26	.0366071	110	3 - 26	.0491071
27	0 - 27	.0120536	55	1 - 27	.0245536	83	2 - 27	.0370536	111	3 - 27	.0495536

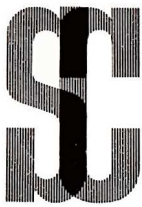


CHART NO. 7

Feet, Inches and Eighths of an Inch as decimals of a Yard

12 inches = 1 ft.  
 3 ft. = 1 yd.  
 36 inches = 1 yd.

Feet	Inches		1/8	1/4	3/8	1/2	5/8	3/4	7/8	Inches
-	0		.003472	.00694	.010416	.0138	.017361	.02083	.024305	-
-	1	.027	.03125	.03472	.038194	.0416	.045138	.04861	.052083	1
-	2	.05	.059027	.0625	.065972	.0694	.072916	.07638	.079861	2
-	3	.083	.086805	.09027	.09375	.0972	.100694	.10416	.107638	3
-	4	.1	.114583	.11805	.121527	.125	.128472	.13194	.135416	4
-	5	.138	.142361	.14583	.149305	.1527	.15625	.15972	.163194	5
-	6	.16	.170138	.17361	.177083	.1805	.184027	.1875	.190972	6
-	7	.194	.197916	.20138	.204861	.2083	.211805	.21527	.21875	7
-	8	.2	.225694	.22916	.232638	.2361	.239583	.24305	.246527	8
-	9	.25	.253472	.25694	.260416	.2638	.267361	.27083	.274305	9
-	10	.27	.28125	.28472	.288194	.2916	.295138	.29861	.302083	10
-	11	.305	.309027	.3125	.315972	.3194	.322916	.32638	.329861	11
1	0	.3	.336805	.34027	.34375	.3472	.350694	.35416	.357638	12
1	1	.361	.364583	.36805	.371527	.375	.378472	.38194	.385416	13
1	2	.38	.392361	.39583	.399305	.4027	.40625	.40972	.413194	14
1	3	.416	.420138	.42361	.427083	.4305	.434027	.4375	.440972	15
1	4	.4	.447916	.45138	.454861	.4583	.461805	.46527	.46875	16
1	5	.472	.475694	.47916	.482638	.4861	.489583	.49305	.496527	17
1	6	.5	.503472	.50694	.510416	.5138	.517361	.52083	.524305	18
1	7	.527	.53125	.53472	.538194	.5416	.545138	.54861	.552083	19
1	8	.5	.559027	.5625	.565972	.5694	.572916	.57638	.579861	20
1	9	.583	.586805	.59027	.59375	.5972	.600694	.60416	.607638	21
1	10	.61	.614583	.61805	.621527	.625	.628472	.63194	.635416	22
1	11	.638	.642361	.64583	.649305	.6527	.65625	.65972	.663194	23
2	0	.6	.670138	.67361	.677083	.6805	.684027	.6875	.690972	24
2	1	.694	.697916	.70138	.704861	.7083	.711805	.71527	.71875	25
2	2	.72	.725694	.72916	.732638	.7361	.739583	.74305	.746527	26
2	3	.75	.753472	.75694	.760416	.7638	.767361	.77083	.774305	27
2	4	.7	.78125	.78472	.788194	.7916	.795138	.79861	.802083	28
2	5	.805	.809027	.8125	.815972	.8194	.822916	.82638	.829861	29
2	6	.83	.836805	.84027	.84375	.8472	.850694	.85416	.857638	30
2	7	.861	.864583	.86805	.871527	.875	.878472	.88194	.885416	31
2	8	.8	.892361	.89583	.899305	.9027	.90625	.90972	.913194	32
2	9	.916	.920138	.92361	.927083	.9305	.934027	.9375	.940972	33
2	10	.94	.947916	.95138	.954861	.9583	.961805	.96527	.96875	34
2	11	.972	.975694	.97916	.982638	.9861	.989583	.99305	.996527	35



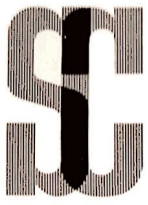


CHART NO. 8

Decimals of a Gross

12 Singles = 1 Dozen  
 12 Dozen = 1 Gross  
 144 Singles = 1 Gross

Dozen Singles	Decimal	Dozen Singles	Decimal	Dozen Singles	Decimal	Dozen Singles	Decimal	Dozen Singles	Decimal	Dozen Singles	Decimal
0		0	.16	0	.3	0	.5	0	.6	0	.83
1	.00694	1	.17361	1	.34027	1	.50694	1	.67361	1	.84027
2	.0138	2	.1805	2	.3472	2	.5138	2	.6805	2	.8472
3	.02083	3	.1875	3	.35416	3	.52083	3	.6875	3	.85416
4	.027	4	.194	4	.361	4	.527	4	.694	4	.861
<b>0</b> <sup>5</sup>	.03472	<b>2</b> <sup>5</sup>	.20138	<b>4</b> <sup>5</sup>	.36805	<b>6</b> <sup>5</sup>	.53472	<b>8</b> <sup>5</sup>	.70138	<b>10</b> <sup>5</sup>	.86805
<b>0</b> <sup>6</sup>	.0416	<b>2</b> <sup>6</sup>	.2083	<b>4</b> <sup>6</sup>	.375	<b>6</b> <sup>6</sup>	.5416	<b>8</b> <sup>6</sup>	.7083	<b>10</b> <sup>6</sup>	.875
7	.04861	7	.21527	7	.38194	7	.54861	7	.71527	7	.88194
8	.05	8	.2	8	.38	8	.5	8	.72	8	.8
9	.0625	9	.22916	9	.39583	9	.5625	9	.72916	9	.89583
10	.0694	10	.2361	10	.4027	10	.5694	10	.7361	10	.9027
11	.07638	11	.24305	11	.40972	11	.57638	11	.74305	11	.90972
0	.083	0	.25	0	.416	0	.583	0	.75	0	.916
1	.09027	1	.25694	1	.42361	1	.59027	1	.75694	1	.92361
2	.0972	2	.2638	2	.4305	2	.5972	2	.7638	2	.9305
3	.10416	3	.27083	3	.4375	3	.60416	3	.77083	3	.9375
4	.1	4	.27	4	.4	4	.61	4	.7	4	.94
<b>1</b> <sup>5</sup>	.11805	<b>3</b> <sup>5</sup>	.28472	<b>5</b> <sup>5</sup>	.45138	<b>7</b> <sup>5</sup>	.61805	<b>9</b> <sup>5</sup>	.78472	<b>11</b> <sup>5</sup>	.95138
<b>1</b> <sup>6</sup>	.125	<b>3</b> <sup>6</sup>	.2916	<b>5</b> <sup>6</sup>	.4583	<b>7</b> <sup>6</sup>	.625	<b>9</b> <sup>6</sup>	.7916	<b>11</b> <sup>6</sup>	.9583
7	.13194	7	.29861	7	.46527	7	.63194	7	.79861	7	.96527
8	.138	8	.305	8	.472	8	.638	8	.805	8	.972
9	.14583	9	.3125	9	.47916	9	.64583	9	.8125	9	.97916
10	.1527	10	.3194	10	.4861	10	.6527	10	.8194	10	.9861
11	.15972	11	.32638	11	.49305	11	.65972	11	.82638	11	.99305

CHART NO. 9

Minutes as decimals of an Hour

Mins	Decimal	Mins	Decimal	Mins	Decimal	Mins	Decimal	Mins	Decimal	Mins	Decimal
1	.016	11	.183	21	.35	31	.516	41	.683	51	.85
2	.03	12	.2	22	.36	32	.53	42	.7	52	.86
3	.05	13	.216	23	.383	33	.55	43	.716	53	.883
4	.06	14	.23	24	.4	34	.56	44	.73	54	.9
5	.083	15	.25	25	.416	35	.583	45	.75	55	.916
6	.1	16	.26	26	.43	36	.6	46	.76	56	.93
7	.116	17	.283	27	.45	37	.616	47	.783	57	.95
8	.13	18	.3	28	.46	38	.63	48	.8	58	.96
9	.15	19	.316	29	.483	39	.65	49	.816	59	.983
10	.16	20	.3	30	.5	40	.6	50	.83		



CHART No. 10

Common Fractions and their Decimal Equivalents

	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{12}$	$\frac{1}{16}$	$\frac{1}{27}$	$\frac{1}{32}$	$\frac{1}{64}$			
1	.5	.3	.25	.2	.16	.142857	.125	.083	.0625	.037037	.03125	1	.015625	33	.515625
2		.6	.5	.4	.3	.285714	.25	.16	.125	.074074	.0625	2	.03125	34	.53125
3			.75	.6	.5	.428571	.375	.25	.1875	.1	.09375	3	.046875	35	.546875
4				.8	.6	.571429	.5	.3	.25	.148148	.125	4	.0625	36	.5625
5					.83	.714286	.625	.416	.3125	.185185	.15625	5	.078125	37	.578125
6						.857143	.75	.5	.375	.2	.1875	6	.09375	38	.59375
7							.875	.583	.4375	.259259	.21875	7	.109375	39	.609375
8								.6	.5	.296296	.25	8	.125	40	.625
9								.75	.5625	.3	.28125	9	.140625	41	.640625
10								.83	.625	.370370	.3125	10	.15625	42	.65625
11								.916	.6875	.407407	.34375	11	.171875	43	.671875
12									.75	.4	.375	12	.1875	44	.6875
13									.8125	.481481	.40625	13	.203125	45	.703125
14									.875	.518519	.4375	14	.21875	46	.71875
15									.9375	.5	.46875	15	.234375	47	.734375
16										.592593	.5	16	.25	48	.75
17										.629630	.53125	17	.265625	49	.765625
18										.6	.5625	18	.28125	50	.78125
19										.703704	.59375	19	.296875	51	.796875
20										.740741	.625	20	.3125	52	.8125
21										.7	.65625	21	.328125	53	.828125
22										.814815	.6875	22	.34375	54	.84375
23										.851852	.71875	23	.359375	55	.859375
24										.8	.75	24	.375	56	.875
25										.925926	.78125	25	.390625	57	.890625
26										.962963	.8125	26	.40625	58	.90625
27											.84375	27	.421875	59	.921875
28											.875	28	.4375	60	.9375
29											.90625	29	.453125	61	.953125
30											.9375	30	.46875	62	.96875
31											.96875	31	.484375	63	.984375
32												32	.5		





Metric Conversion Table

To convert :-			Multiply by :-	
Kilos	to lb.	x	2.204 622 622	
..	.. cwts.	x	.019 684 130 55	
..	.. tons	x	.000 984 206 527 6	
Lb.	to kilos	x	.453 592 37	*
..	.. grammes	x	453.592 37	*
Ozs.	.. ..	x	28.349 523 13	
Grammes	.. lb.	x	.002 204 622 622	
..	.. oz.	x	.035 273 962 95	
<hr/>				
Metres	to Yards	x	1.093 613 298	
..	.. Feet	x	3.280 839 895	
..	.. Inches	x	39.370 078 74	
Millimetres	to Inches	x	.039 370 078 74	
Yards	to Metres	x	.914 4	*
Feet	.. ..	x	.304 8	*
Inches	.. ..	x	.025 4	*
..	.. Millimetres	x	25.4	*
<hr/>				
Sq. Metres	to Sq. Yards	x	1.195 990 046	
..	.. .. Feet	x	10.763 910 42	
Sq. Yards	.. .. Metres	x	.836 127 36	*
..	.. Feet .. ..	x	.092 903 04	*
<hr/>				
Cubic Metres	to Cubic Yards	x	1.307 950 619	
..	.. .. Feet	x	35.314 666 72	
Cubic Yards	.. .. Metres	x	.764 554 858	
..	.. Feet .. ..	x	.028 316 846 59	
<hr/>				
Litres	to Gallons	x	.219 976	
..	.. Pints	x	1.759 8	
Gallons	to Litres	x	4.545 96	
Pints	.. ..	x	.568 245	
<hr/>				
<p>* These multipliers are exact and conform to B.S. 350 : 1962. Exact conversion between litres and gallons has not yet been agreed internationally (June 1967) and results can only be obtained to six significant figures.</p>				



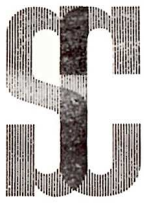


CHART NO. 12

Dates as parts and decimals of a year – 365 Day Basis

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day
	1	2	3	4	5	6	7	8	9	10	11	12	
1	.002740 364	.087671 333	.164384 305	.249315 274	.331507 244	.416438 213	.498630 183	.583562 152	.668493 121	.750685 91	.835616 60	.917808 30	1
2	.005479 363	.090411 332	.167123 304	.252056 273	.334247 243	.419178 212	.501370 182	.586301 151	.671233 120	.753425 90	.838356 59	.920548 29	2
3	.008219 362	.093151 331	.169863 303	.254795 272	.336986 242	.421918 211	.504110 181	.589041 150	.673973 119	.756164 89	.841096 58	.923288 28	3
4	.010959 361	.095890 330	.172603 302	.257534 271	.339726 241	.424658 210	.506849 180	.591781 149	.676712 118	.758904 88	.843836 57	.926027 27	4
5	.013699 360	.098630 329	.175342 301	.260274 270	.342466 240	.427397 209	.509589 179	.594521 148	.679452 117	.761644 87	.846575 56	.928767 26	5
6	.016438 359	.101370 328	.178082 300	.263014 269	.345205 239	.430137 208	.512329 178	.597260 147	.682192 116	.764384 86	.849315 55	.931507 25	6
7	.019178 358	.104110 327	.180822 299	.265753 268	.347945 238	.432877 207	.515068 177	.600000 146	.684932 115	.767123 85	.852055 54	.934247 24	7
8	.021918 357	.106849 326	.183562 298	.268493 267	.350685 237	.435616 206	.517808 176	.602740 145	.687671 114	.769863 84	.854795 53	.936986 23	8
9	.024658 356	.109589 325	.186301 297	.271233 266	.353425 236	.438356 205	.520548 175	.605479 144	.690411 113	.772603 83	.857534 52	.939726 22	9
10	.027397 355	.112329 324	.189041 296	.273973 265	.356164 235	.441096 204	.523288 174	.608219 143	.693151 112	.775342 82	.860274 51	.942466 21	10
11	.030137 354	.115068 323	.191781 295	.276712 264	.358904 234	.443836 203	.526027 173	.610959 142	.695890 111	.778082 81	.863014 50	.945205 20	11
12	.032877 353	.117808 322	.194521 294	.279452 263	.361644 233	.446575 202	.528767 172	.613699 141	.698630 110	.780822 80	.865753 49	.947946 19	12
13	.035616 352	.120548 321	.197260 293	.282192 262	.364384 232	.449315 201	.531507 171	.616438 140	.701370 109	.783562 79	.868493 48	.950685 18	13
14	.038356 351	.123288 320	.200000 292	.284932 261	.367123 231	.452055 200	.534247 170	.619178 139	.704110 108	.786301 78	.871233 47	.953425 17	14
15	.041096 350	.126027 319	.202740 291	.287671 260	.369863 230	.454795 199	.536986 169	.621918 138	.706849 107	.789041 77	.873973 46	.956164 16	15
16	.043836 349	.128767 318	.205479 290	.290411 259	.372603 229	.457534 198	.539726 168	.624658 137	.709589 106	.791781 76	.876712 45	.958904 15	16
17	.046575 348	.131507 317	.208219 289	.293151 258	.375342 228	.460274 197	.542466 167	.627397 136	.712329 105	.794521 75	.879452 44	.961644 14	17
18	.049315 347	.134247 316	.210959 288	.295890 257	.378082 227	.463014 196	.545205 166	.630137 135	.715068 104	.797260 74	.882192 43	.964384 13	18
19	.052055 346	.136986 315	.213699 287	.298630 256	.380822 226	.465753 195	.547945 165	.632877 134	.717808 103	.800000 73	.884932 42	.967123 12	19
20	.054795 345	.139726 314	.216438 286	.301370 255	.383562 225	.468493 194	.550685 164	.635616 133	.720548 102	.802740 72	.887671 41	.969863 11	20
21	.057534 344	.142466 313	.219178 285	.304110 254	.386301 224	.471233 193	.553425 163	.638356 132	.723288 101	.805479 71	.890411 40	.972603 10	21
22	.060274 343	.145205 312	.221918 284	.306849 253	.389041 223	.473973 192	.556164 162	.641096 131	.726027 100	.808219 70	.893151 39	.975342 9	22
23	.063014 342	.147945 311	.224658 283	.309589 252	.391781 222	.476712 191	.558904 161	.643836 130	.728767 99	.810959 69	.895890 38	.978082 8	23
24	.065753 341	.150685 310	.227397 282	.312329 251	.394521 221	.479452 190	.561644 160	.646575 129	.731507 98	.813699 68	.898630 37	.980822 7	24
25	.068493 340	.153425 309	.230137 281	.315068 250	.397260 220	.482192 189	.564384 159	.649315 128	.734247 97	.816438 67	.901370 36	.983562 6	25
26	.071233 339	.156164 308	.232877 280	.317808 249	.400000 219	.484932 188	.567123 158	.652055 127	.736986 96	.819178 66	.904110 35	.986301 5	26
27	.073973 338	.158904 307	.235616 279	.320548 248	.402740 218	.487671 187	.569863 157	.654795 126	.739726 95	.821918 65	.906849 34	.989041 4	27
28	.076712 337	.161644 306	.238356 278	.323288 247	.405479 217	.490411 186	.572603 156	.657534 125	.742466 94	.824658 64	.909589 33	.991781 3	28
29	.079452 336	.164384 305	.241096 277	.326027 246	.408219 216	.493151 185	.575342 155	.660274 124	.745205 93	.827397 63	.912329 32	.994521 2	29
30	.082192 335	.167123 304	.243836 276	.328767 245	.410959 215	.495890 184	.578082 154	.663014 123	.747945 92	.830137 62	.915068 31	.997260 1	30
31	.084932 334	.169863 303	.246575 275	.331507 244	.413699 214	.498630 183	.580822 153	.665753 122	.749315 91	.832877 61	1.000000 0		31
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	





CHART NO. 13

Days as decimals of a year – 360 Day Basis

1	.0027	61	.1694	121	.3361	181	.5027	241	.6694	301	.8361
2	.006	62	.172	122	.338	182	.506	242	.672	302	.838
3	.0083	63	.175	123	.3416	183	.5083	243	.675	303	.8416
4	.01	64	.17	124	.34	184	.51	244	.67	304	.84
5	.0138	65	.1805	125	.3472	185	.5138	245	.6805	305	.8472
6	.016	66	.183	126	.35	186	.516	246	.683	306	.85
7	.0194	67	.1861	127	.3527	187	.5194	247	.6861	307	.8527
8	.02	68	.18	128	.35	188	.52	248	.68	308	.85
9	.025	69	.1916	129	.3583	189	.525	249	.6916	309	.8583
10	.027	70	.194	130	.361	190	.527	250	.694	310	.861
11	.0305	71	.1972	131	.3638	191	.5305	251	.6972	311	.8638
12	.03	72	.2	132	.36	192	.53	252	.7	312	.86
13	.0361	73	.2027	133	.3694	193	.5361	253	.7027	313	.8694
14	.038	74	.205	134	.372	194	.538	254	.705	314	.872
15	.0416	75	.2083	135	.375	195	.5416	255	.7083	315	.875
16	.04	76	.21	136	.37	196	.54	256	.71	316	.87
17	.0472	77	.2138	137	.3805	197	.5472	257	.7138	317	.8805
18	.05	78	.216	138	.383	198	.55	258	.716	318	.883
19	.0527	79	.2194	139	.3861	199	.5527	259	.7194	319	.8861
20	.05	80	.2	140	.38	200	.5	260	.72	320	.8
21	.0583	81	.225	141	.3916	201	.5583	261	.725	321	.8916
22	.061	82	.227	142	.394	202	.561	262	.727	322	.894
23	.0638	83	.2305	143	.3972	203	.5638	263	.7305	323	.8972
24	.06	84	.23	144	.4	204	.56	264	.73	324	.9
25	.0694	85	.2361	145	.4027	205	.5694	265	.7361	325	.9027
26	.072	86	.238	146	.405	206	.572	266	.738	326	.905
27	.075	87	.2416	147	.4083	207	.575	267	.7416	327	.9083
28	.07	88	.24	148	.41	208	.57	268	.74	328	.91
29	.0805	89	.2472	149	.4138	209	.5805	269	.7472	329	.9138
30	.083	90	.25	150	.416	210	.583	270	.75	330	.916
31	.0861	91	.2527	151	.4194	211	.5861	271	.7527	321	.9194
32	.08	92	.25	152	.42	212	.58	272	.75	332	.92
33	.0916	93	.2583	153	.425	213	.5916	273	.7583	333	.925
34	.094	94	.261	154	.427	214	.594	274	.761	334	.927
35	.0972	95	.2638	155	.4305	215	.5972	275	.7638	335	.9305
36	.1	96	.26	156	.43	216	.6	276	.76	336	.93
37	.1027	97	.2694	157	.4361	217	.6027	277	.7694	337	.9361
38	.105	98	.272	158	.438	218	.605	278	.772	338	.938
39	.1083	99	.275	159	.4416	219	.6083	279	.775	339	.9416
40	.1	100	.27	160	.4	220	.61	280	.7	340	.94
41	.1138	101	.2805	161	.4472	221	.6138	281	.7805	341	.9472
42	.116	102	.283	162	.45	222	.616	282	.783	342	.95
43	.1194	103	.2861	163	.4527	223	.6194	283	.7861	343	.9527
44	.12	104	.28	164	.45	224	.62	284	.78	344	.95
45	.125	105	.2916	165	.4583	225	.625	285	.7916	345	.9583
46	.127	106	.294	166	.461	226	.627	286	.794	346	.961
47	.1305	107	.2972	167	.4638	227	.6305	287	.7972	347	.9638
48	.13	108	.3	168	.46	228	.63	288	.8	348	.96
49	.1361	109	.3027	169	.4694	229	.6361	289	.8027	349	.9694
50	.138	110	.305	170	.472	230	.638	290	.805	350	.972
51	.1416	111	.3083	171	.475	231	.6416	291	.8083	351	.975
52	.14	112	.31	172	.47	232	.64	292	.81	352	.97
53	.1472	113	.3138	173	.4805	233	.6472	293	.8138	353	.9805
54	.15	114	.316	174	.483	234	.65	294	.816	354	.983
55	.1527	115	.3194	175	.4861	235	.6527	295	.8194	355	.9861
56	.15	116	.32	176	.48	236	.65	296	.82	356	.98
57	.1583	117	.325	177	.4916	237	.6583	297	.825	357	.9916
58	.161	118	.327	178	.494	238	.661	298	.827	358	.994
59	.1638	119	.3305	179	.4972	239	.6638	299	.8305	359	.9972
60	.16	120	.3	180	.5	240	.6	300	.83		



## CHART NO. 14

### Area and Volume Formulae

$\pi$  (Pi) is the ratio of the circumference to the diameter of any circle. Its value, correct to ten significant figures, is 3.141 592 654; 3.1416 is accurate enough for most purposes.

If  $r$  = radius.

$$\begin{aligned}\text{Circumference of a circle} &= 2 \pi r \\ \text{Area of a circle} &= \pi r^2 \\ \text{Surface of a sphere} &= 4 \pi r^2 \\ \text{Volume of a sphere} &= \frac{4}{3} \pi r^3\end{aligned}$$

If  $c$  = length of chord

$h$  = height

$r$  = radius

$$\begin{aligned}\text{Area of a segment of circle} &= \frac{2}{3} ch + \frac{h^3}{2c} \quad (\text{approx.}) \\ \text{Area of curved surface of} \\ &\quad \text{a cylinder} &= 2 \pi r h \\ \text{Volume of a cylinder} &= \pi r^2 h \\ \text{Volume of a core} &= \frac{1}{3} \pi r^2 h\end{aligned}$$

If  $a$ ,  $b$ , and  $c$  are the sides of a triangle

Area of a triangle

$$= \frac{1}{2} \text{ base } \times \text{ perpendicular height}$$

$$= \sqrt{s(s-a)(s-b)(s-c)}$$

$$\text{where } 2s = a + b + c.$$







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