

PERMANENT WAY
NOTES

FUNCTIONS OF 'N'

THESE NOTES ARE INTENDED FOR THE GUIDANCE AND ASSISTANCE OF STAFF ENGAGED UPON PERMANENT WAY WORK. THEY DO NOT IN ANY WAY MODIFY, SUPPLEMENT OR AMEND THE INSTRUCTIONS LAID DOWN IN E.D.I., STANDARD DRAWINGS, CIRCULARS ETC., WHICH SHOULD BE REFERRED TO IN ALL CASES.

N	N ²	N ² + $\frac{1}{4}$	$\sqrt{N^2 + \frac{1}{4}}$	$\frac{1}{\sqrt{N^2 + \frac{1}{4}}}$	$\frac{1}{N^2 + \frac{1}{4}}$	COS. N	TAN. N	SIN. N
2½	6.25	6.5	2.549509757	0.3922322702	0.1538461538	0.9230769231	0.4166666667	0.3846153
2⅝	6.890625	7.140625	2.672194791	0.3742242158	0.1400437637	0.9299781182	0.3952941176	0.3676148
2¾	7.5625	7.8125	2.795084972	0.3577708764	0.128	0.936	0.3760683761	0.352
2⅞	8.265625	8.515625	2.918154382	0.3426823496	0.1174311927	0.9412844037	0.3586744639	0.33761467
3	9.0	9.25	3.041381265	0.3287979746	0.1081081081	0.9459459459	0.3428571429	0.3243243
3⅛	9.765625	10.015625	3.164747225	0.3159810022	0.09984399376	0.9500780031	0.3284072250	0.31201248
3¼	10.5625	10.8125	3.288236609	0.3041143686	0.09248554913	0.9537572254	0.3151515152	0.3005780
3⅜	11.390625	11.640625	3.411836016	0.2930973222	0.08590604027	0.9570469799	0.3029453015	0.2899328
3½	12.25	12.5	3.535533906	0.2828427125	0.08	0.96	0.2916666667	0.28
3⅝	13.140625	13.390625	3.659320292	0.2732747943	0.07467911319	0.9626604434	0.2812121212	0.27071178
3¾	14.0625	14.3125	3.783186488	0.2643274402	0.06986899563	0.9650655022	0.2714932127	0.2620087
3⅞	15.015625	15.265625	3.907124902	0.2559426753	0.06550665302	0.9672466735	0.2624338624	0.2538382
4	16	16.25	4.031128874	0.2480694692	0.06153846154	0.9692307692	0.2539682540	0.2461538
4¼	18.0625	18.3125	4.279310692	0.2336824951	0.05460750853	0.9726962457	0.2385964912	0.2320819
4½	20.25	20.5	4.527692569	0.2208630522	0.04878048780	0.9756097561	0.225	0.21951219
4¾	22.5625	22.8125	4.776243294	0.2093695690	0.04383561644	0.9780821918	0.2128851541	0.20821917
5	25	25.25	5.024937811	0.1990074380	0.03960396040	0.9801980198	0.2020202020	0.1980198
5¼	27.5625	27.8125	5.273755777	0.1896181853	0.03595505618	0.9820224719	0.1922196796	0.1887640
5½	30.25	30.5	5.522680509	0.1810714921	0.03278688525	0.9836065574	0.1833333333	0.18032786
5¾	33.0625	33.3125	5.771698190	0.1732592327	0.03001876173	0.9849906191	0.1752380952	0.1726078
6	36	36.25	6.020797289	0.1660909597	0.02758620690	0.9862068966	0.1678321678	0.1655172
6¼	39.0625	39.3125	6.269968102	0.1594904446	0.02543720191	0.9872813990	0.1610305958	0.1589825
6½	42.25	42.5	6.519202405	0.1533929978	0.02352941176	0.9882352941	0.1547619048	0.15294117
6¾	45.5625	45.8125	6.768493185	0.1477433710	0.02182810368	0.9890859482	0.1489655172	0.1473396
7	49	49.25	7.017834424	0.1424941000	0.02030456853	0.9898477157	0.1435897436	0.14213197
7¼	52.5625	52.8125	7.267220927	0.1376041832	0.01893491124	0.9905325444	0.1385902031	0.13727810
7½	56.25	56.5	7.516648189	0.1330380211	0.01769911504	0.9911504425	0.1339285714	0.1327433
7¾	60.0625	60.3125	7.766112283	0.1287645560	0.01658803088	0.9917098446	0.1295715778	0.1284974
8	64	64.25	8.015609771	0.1247565723	0.01556420233	0.9922178988	0.1254901961	0.1245136
8¼	68.0625	68.3125	8.265137627	0.12099901208	0.01463860933	0.9926806953	0.1216589862	0.1207688
8½	72.25	72.5	8.514693183	0.1174440439	0.01379310345	0.9931034483	0.1180555556	0.1172413
8¾	76.5625	76.8125	8.764274071	0.1140995811	0.01301871440	0.9934906428	0.1146601147	0.1139137
9	81	81.25	9.013878189	0.1109400392	0.01230769231	0.9938461538	0.1114551084	0.1107692
9½	90.25	90.5	9.513148795	0.1051176662	0.01104972376	0.9944751381	0.1055555556	0.104972
10	100	100.25	10.01249220	0.09987523386	0.009975062344	0.9950124688	0.1002506266	0.0997506
10½	110.25	110.5	10.51189802	0.09513029884	0.009049773756	0.9954751131	0.09545454545	0.095022
11	121	121.25	11.01135777	0.09081532186	0.008247422680	0.9958762887	0.09109730849	0.0907216
11½	132.25	132.5	11.51086443	0.08687444858	0.007547169811	0.9962264151	0.08712121212	0.086792
12	144	144.25	12.01041215	0.08326108942	0.006932409012	0.9965337955	0.08347826087	0.0831889
12½	156.25	156.5	12.50999600	0.07993607672	0.006389776358	0.9968051118	0.08012820513	0.079872
13	169	169.25	13.00961183	0.07686624421	0.005908419498	0.9970457903	0.07703703704	0.076809
13½	182.25	182.5	13.50925609	0.07402332100	0.005479452055	0.9972602740	0.07417582418	0.073972
14	196	196.25	14.00892573	0.07138306101	0.005095541401	0.9974522293	0.07151979566	0.0713375
14½	210.25	210.5	14.50861813	0.06892455167	0.004750593824	0.9976247031	0.06904761905	0.068883
15	225	225.25	15.00833102	0.06662966046	0.004439511654	0.9977802442	0.06674082314	0.066592
16	256	256.25	16.00781059	0.06246950477	0.003902439024	0.9980487805	0.06256109482	0.062439
18	324	324.25	18.00694311	0.05553413447	0.003084040093	0.9984579800	0.05559845560	0.0555127
20	400	400.25	20.00624902	0.04998438233	0.002498438476	0.9987507808	0.05003126954	0.049968