

TABLES ASSUME NOTHERN HEMISPHERE--CHANGE LAT SIGNS FOR SOUTHERN HEMISPHERE

True HD	Lat Fact	Lon Fact	True HD (Reverse Signs)	True HD	Lat Fact	Lon Fact	True HD (Reverse Signs)
0	1.00	0.00	180	90	0.00	-1.00	270
2	1.00	-0.03	182	92	-0.03	-1.00	272
4	1.00	-0.07	184	94	-0.07	-1.00	274
6	0.99	-0.10	186	96	-0.10	-0.99	276
8	0.99	-0.14	188	98	-0.14	-0.99	278
10	0.98	-0.17	190	100	-0.17	-0.98	280
12	0.98	-0.21	192	102	-0.21	-0.98	282
14	0.97	-0.24	194	104	-0.24	-0.97	284
16	0.96	-0.28	196	106	-0.28	-0.96	286
18	0.95	-0.31	198	108	-0.31	-0.95	288
20	0.94	-0.34	200	110	-0.34	-0.94	290
22	0.93	-0.37	202	112	-0.37	-0.93	292
24	0.91	-0.41	204	114	-0.41	-0.91	294
26	0.90	-0.44	206	116	-0.44	-0.90	296
28	0.88	-0.47	208	118	-0.47	-0.88	298
30	0.87	-0.50	210	120	-0.50	-0.87	300
32	0.85	-0.53	212	122	-0.53	-0.85	302
34	0.83	-0.56	214	124	-0.56	-0.83	304
36	0.81	-0.59	216	126	-0.59	-0.81	306
38	0.79	-0.62	218	128	-0.62	-0.79	308
40	0.77	-0.64	220	130	-0.64	-0.77	310
42	0.74	-0.67	222	132	-0.67	-0.74	312
44	0.72	-0.69	224	134	-0.69	-0.72	314
46	0.69	-0.72	226	136	-0.72	-0.69	316
48	0.67	-0.74	228	138	-0.74	-0.67	318
50	0.64	-0.77	230	140	-0.77	-0.64	320
52	0.62	-0.79	232	142	-0.79	-0.62	322
54	0.59	-0.81	234	144	-0.81	-0.59	324
56	0.56	-0.83	236	146	-0.83	-0.56	326
58	0.53	-0.85	238	148	-0.85	-0.53	328
60	0.50	-0.87	240	150	-0.87	-0.50	330
62	0.47	-0.88	242	152	-0.88	-0.47	332
64	0.44	-0.90	244	154	-0.90	-0.44	334
66	0.41	-0.91	246	156	-0.91	-0.41	336
68	0.37	-0.93	248	158	-0.93	-0.37	338
70	0.34	-0.94	250	160	-0.94	-0.34	340
72	0.31	-0.95	252	162	-0.95	-0.31	342
74	0.28	-0.96	254	164	-0.96	-0.28	344
76	0.24	-0.97	256	166	-0.97	-0.24	346
78	0.21	-0.98	258	168	-0.98	-0.21	348
80	0.17	-0.98	260	170	-0.98	-0.17	350
82	0.14	-0.99	262	172	-0.99	-0.14	352
84	0.10	-0.99	264	174	-0.99	-0.10	354
86	0.07	-1.00	266	176	-1.00	-0.07	356
88	0.03	-1.00	268	178	-1.00	-0.03	358
90	0.00	-1.00	270	180	-1.00	0.00	360

NM per 1° of Lat/Long are not used in the DR calculation

(n or s)	NM per 1°	NM per 1°	1' per NM	1' per NM
Latitude	of Lat	of Long	of Lat	of Long
0	59.71	60.11	1.005	0.998
1	59.71	60.10	1.005	0.998
2	59.71	60.07	1.005	0.999
3	59.71	60.03	1.005	1.000
4	59.71	59.96	1.005	1.001
5	59.71	59.88	1.005	1.002
6	59.71	59.78	1.005	1.004
7	59.71	59.66	1.005	1.006
8	59.72	59.53	1.005	1.008
9	59.72	59.37	1.005	1.011
10	59.72	59.20	1.005	1.014
11	59.73	59.01	1.005	1.017
12	59.73	58.80	1.004	1.020
13	59.74	58.58	1.004	1.024
14	59.74	58.33	1.004	1.029
15	59.75	58.07	1.004	1.033
16	59.75	57.79	1.004	1.038
17	59.76	57.50	1.004	1.044
18	59.76	57.18	1.004	1.049
19	59.77	56.85	1.004	1.055
20	59.78	56.50	1.004	1.062
21	59.78	56.14	1.004	1.069
22	59.79	55.76	1.004	1.076
23	59.80	55.36	1.003	1.084
24	59.80	54.94	1.003	1.092
25	59.81	54.51	1.003	1.101
26	59.82	54.06	1.003	1.110
27	59.83	53.59	1.003	1.120
28	59.84	53.11	1.003	1.130
29	59.85	52.61	1.003	1.140
30	59.86	52.10	1.002	1.152
31	59.86	51.57	1.002	1.164
32	59.87	51.02	1.002	1.176
33	59.88	50.46	1.002	1.189
34	59.89	49.88	1.002	1.203
35	59.90	49.29	1.002	1.217
36	59.91	48.68	1.001	1.232
37	59.92	48.06	1.001	1.248
38	59.93	47.43	1.001	1.265
39	59.94	46.77	1.001	1.283
40	59.95	46.11	1.001	1.301
41	59.96	45.43	1.001	1.321
42	59.97	44.74	1.000	1.341
43	59.99	44.03	1.000	1.363
44	60.00	43.31	1.000	1.385
45	60.01	42.57	1.000	1.409
46	60.02	41.83	1.000	1.434
47	60.03	41.07	1.000	1.461
48	60.04	40.29	0.999	1.489
49	60.05	39.51	0.999	1.519

NM per 1° of Lat/Long are not used in the DR calculation

(n or s)	NM per 1°	NM per 1°	1' per NM	1' per NM
Latitude	of Lat	of Long	of Lat	of Long
50	60.06	38.71	0.999	1.550
51	60.07	37.90	0.999	1.583
52	60.08	37.08	0.999	1.618
53	60.09	36.25	0.999	1.655
54	60.10	35.41	0.998	1.695
55	60.11	34.55	0.998	1.736
56	60.12	33.69	0.998	1.781
57	60.13	32.81	0.998	1.828
58	60.14	31.93	0.998	1.879
59	60.15	31.03	0.998	1.933
60	60.16	30.13	0.997	1.991
61	60.17	29.22	0.997	2.054
62	60.18	28.29	0.997	2.121
63	60.18	27.36	0.997	2.193
64	60.19	26.42	0.997	2.271
65	60.20	25.47	0.997	2.355
66	60.21	24.52	0.997	2.447
67	60.22	23.55	0.996	2.547
68	60.22	22.58	0.996	2.657
69	60.23	21.60	0.996	2.777
70	60.24	20.62	0.996	2.910
71	60.25	19.63	0.996	3.057
72	60.25	18.63	0.996	3.220
73	60.26	17.63	0.996	3.404
74	60.26	16.62	0.996	3.610
75	60.27	15.61	0.996	3.845
76	60.27	14.59	0.995	4.113
77	60.28	13.56	0.995	4.423
78	60.28	12.54	0.995	4.786
79	60.29	11.51	0.995	5.215
80	60.29	10.47	0.995	5.730
81	60.29	9.43	0.995	6.360
82	60.30	8.39	0.995	7.149
83	60.30	7.35	0.995	8.164
84	60.30	6.30	0.995	9.518
85	60.31	5.26	0.995	11.415
86	60.31	4.21	0.995	14.262
87	60.31	3.16	0.995	19.009
88	60.31	2.10	0.995	28.507
89	60.31	1.05	0.995	57.004