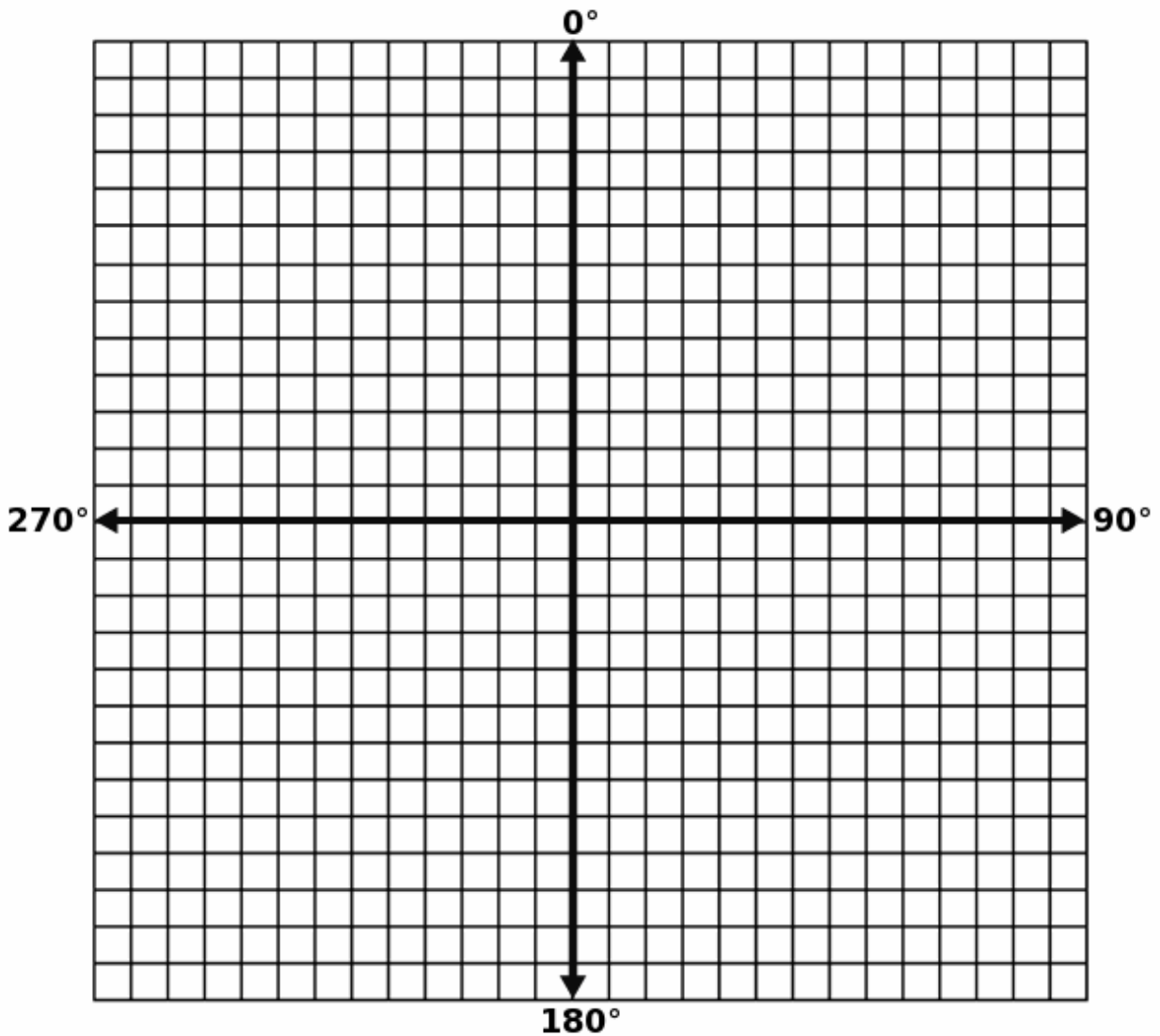


Converting GPS Coordinates to Compass Headings

	Latitude	Longitude
Your coordinates:	LAT1=	LON1=
Their coordinates:	LAT2=	LON2=
Difference:	LAT2-LAT1=	LON2-LON1=
Slope:	$\Delta\text{LAT}/\Delta\text{LON} =$	
Polar Angle:	$\tan^{-1}(\text{SLOPE}) =$	
Heading:	If $\Delta\text{LON}-$ & $\Delta\text{LAT}+$, 450 - Angle If $\Delta\text{LON}-$ & $\Delta\text{LAT}-$, 270 - Angle	If $\Delta\text{LON}+$ & $\Delta\text{LAT}+$, 90 - Angle If $\Delta\text{LON}+$ & $\Delta\text{LAT}-$, 270 - Angle



Inverse Tangent Quick Reference:

Slope	Angle	Slope	Angle	Slope	Angle	Slope	Angle
0.0175	1	1.0355	46	-57.2900	91	-0.9657	136
0.0349	2	1.0724	47	-28.6363	92	-0.9325	137
0.0524	3	1.1106	48	-19.0811	93	-0.9004	138
0.0699	4	1.1504	49	-14.3007	94	-0.8693	139
0.0875	5	1.1918	50	-11.4301	95	-0.8391	140
0.1051	6	1.2349	51	-9.5144	96	-0.8098	141
0.1228	7	1.2799	52	-8.1443	97	-0.7813	142
0.1405	8	1.3270	53	-7.1154	98	-0.7536	143
0.1584	9	1.3764	54	-6.3138	99	-0.7265	144
0.1763	10	1.4281	55	-5.6713	100	-0.7002	145
0.1944	11	1.4826	56	-5.1446	101	-0.6745	146
0.2126	12	1.5399	57	-4.7046	102	-0.6494	147
0.2309	13	1.6003	58	-4.3315	103	-0.6249	148
0.2493	14	1.6643	59	-4.0108	104	-0.6009	149
0.2679	15	1.7321	60	-3.7321	105	-0.5774	150
0.2867	16	1.8040	61	-3.4874	106	-0.5543	151
0.3057	17	1.8807	62	-3.2709	107	-0.5317	152
0.3249	18	1.9626	63	-3.0777	108	-0.5095	153
0.3443	19	2.0503	64	-2.9042	109	-0.4877	154
0.3640	20	2.1445	65	-2.7475	110	-0.4663	155
0.3839	21	2.2460	66	-2.6051	111	-0.4452	156
0.4040	22	2.3559	67	-2.4751	112	-0.4245	157
0.4245	23	2.4751	68	-2.3559	113	-0.4040	158
0.4452	24	2.6051	69	-2.2460	114	-0.3839	159
0.4663	25	2.7475	70	-2.1445	115	-0.3640	160
0.4877	26	2.9042	71	-2.0503	116	-0.3443	161
0.5095	27	3.0777	72	-1.9626	117	-0.3249	162
0.5317	28	3.2709	73	-1.8807	118	-0.3057	163
0.5543	29	3.4874	74	-1.8040	119	-0.2867	164
0.5774	30	3.7321	75	-1.7321	120	-0.2679	165
0.6009	31	4.0108	76	-1.6643	121	-0.2493	166
0.6249	32	4.3315	77	-1.6003	122	-0.2309	167
0.6494	33	4.7046	78	-1.5399	123	-0.2126	168
0.6745	34	5.1446	79	-1.4826	124	-0.1944	169
0.7002	35	5.6713	80	-1.4281	125	-0.1763	170
0.7265	36	6.3138	81	-1.3764	126	-0.1584	171
0.7536	37	7.1154	82	-1.3270	127	-0.1405	172
0.7813	38	8.1443	83	-1.2799	128	-0.1228	173
0.8098	39	9.5144	84	-1.2349	129	-0.1051	174
0.8391	40	11.4301	85	-1.1918	130	-0.0875	175
0.8693	41	14.3007	86	-1.1504	131	-0.0699	176
0.9004	42	19.0811	87	-1.1106	132	-0.0524	177
0.9325	43	28.6363	88	-1.0724	133	-0.0349	178
0.9657	44	57.2900	89	-1.0355	134	-0.0175	179
1.0000	45	NORTH	90	-1.0000	135	WEST	180

The angles match when ΔLON is positive. If ΔLON is negative, add 180° to the corresponding angle.