Minutes & Seconds to Decimals of a Degree

	Minutes	Seconds			Minutes	Seconds
1	0.016667	0.000278		31	0.516667	0.008611
2	0.033333	0.000556		32	0.533333	0.008889
3	0.050000	0.000833		33	0.550000	0.009167
4	0.066667	0.001111		34	0.566667	0.009444
5	0.083333	0.001389		35	0.583333	0.009722
6	0.100000	0.001667		36	0.600000	0.010000
7	0.116667	0.001944		37	0.616667	0.010278
8	0.133333	0.002222		38	0.633333	0.010556
9	0.150000	0.002500		39	0.650000	0.010833
10	0.166667	0.002778		40	0.666667	0.011111
11	0.183333	0.003056		41	0.683333	0.011389
12	0.200000	0.003333		42	0.700000	0.011667
13	0.216667	0.003611		43	0.716667	0.011944
14	0.233333	0.003889		44	0.733333	0.012222
15	0.250000	0.004167		45	0.750000	0.012500
16	0.266667	0.004444		46	0.766667	0.012778
17	0.283333	0.004722		47	0.783333	0.013056
18	0.300000	0.005000		48	0.800000	0.013333
19	0.316667	0.005278		49	0.816667	0.013611
20	0.333333	0.005556		50	0.833333	0.013889
21	0.350000	0.005833		51	0.850000	0.014167
22	0.366667	0.006111		52	0.866667	0.014444
23	0.383333	0.006389		53	0.883333	0.014722
24	0.400000	0.006667		54	0.900000	0.015000
25	0.416667	0.006944		55	0.916667	0.015278
26	0.433333	0.007222		56	0.933333	0.015556
27	0.450000	0.007500		57	0.950000	0.015833
28	0.466667	0.007778		58	0.966667	0.016111
29	0.483333	0.008056		59	0.983333	0.016389
30	0.500000	0.008333				

Example: To convert 8° 49’ 27” to decimal of a degree.

Using the chart above:

8° = 8.000000
49’ = 0.816667
27” = 0.007500

Add the three numbers to get the result…..8.824167°

Example: To convert 8.824167° to degrees, minutes and seconds.

First, we know 8.00000 = 8° and 0.824167 degree
Next multiply: (0.824167 degree) * (60 minutes/degree) = 49.45020 minutes.
Now, we know we have 49 minutes and 0.450020 minute.
Next multiply: (0.450020 minute) * (60 seconds/minute) = 27.0012 seconds
For the result: 8° 49’ 27”