

## Solutions for GeoWorkSheet No. 83

Solutions sheet No. 83			Cosine Ratio - Find a Side (degrees & minutes)					
Working								
No.	Opp	Adj	Hyp	Angle	Equation	Calculator	1 Dec. Place	Solution
1	$a$	20	29°25'	$a = 20\cos 29^\circ 25'$	17.42142	17.4	$a = 17.4$	
2	$b$	90	41°42'	$b = 90\cos 41^\circ 42'$	67.197436	67.2	$b = 67.2$	
3	$c$	25	32°8'	$c = 25\cos 32^\circ 8'$	21.170316	21.2	$c = 21.2$	
4	$d$	55	61°45'	$d = 55\cos 61^\circ 45'$	26.032582	26	$d = 26$	
5	$e$	60	40°26'	$e = 60\cos 40^\circ 26'$	45.669667	45.7	$e = 45.7$	
6	$f$	120	37°50'	$f = 120\cos 37^\circ 50'$	94.775796	94.8	$f = 94.8$	
7	$g$	75	28°36'	$g = 75\cos 28^\circ 36'$	65.848723	65.8	$g = 65.8$	
8	$h$	45	37°48'	$h = 45\cos 37^\circ 48'$	35.556976	35.6	$h = 35.6$	
9	$i$	250	38°5'	$i = 250\cos 38^\circ 5'$	196.77862	196.8	$i = 196.8$	
10	$j$	35	55°46'	$j = 35\cos 55^\circ 46'$	19.689756	19.7	$j = 19.7$	
11	$k$	94	55°35'	$k = 94\cos 55^\circ 35'$	53.129458	53.1	$k = 53.1$	
12	$l$	125	42°6'	$l = 125\cos 42^\circ 6'$	92.74698	92.7	$l = 92.7$	
13	$m$	61	42°47'	$m = 61\cos 42^\circ 47'$	44.769576	44.8	$m = 44.8$	
14	$n$	85	20°53'	$n = 85\cos 20^\circ 53'$	79.416197	79.4	$n = 79.4$	
15	$p$	25	51°16'	$p = 25\cos 51^\circ 16'$	15.642415	15.6	$p = 15.6$	
16	$q$	180	48°17'	$q = 180\cos 48^\circ 17'$	119.78055	119.8	$q = 119.8$	
17	$r$	14.6	54°15'	$r = 14.6\cos 54^\circ 15'$	8.5300451	8.5	$r = 8.5$	
18	$s$	4.2	63°32'	$s = 4.2\cos 63^\circ 32'$	1.8718438	1.9	$s = 1.9$	
19	$t$	3.25	58°51'	$t = 3.25\cos 58^\circ 51'$	1.6811612	1.7	$t = 1.7$	
20	$u$	7.5	73°25'	$u = 7.5\cos 73^\circ 25'$	2.1405719	2.1	$u = 2.1$	