

## Solutions for GeoWorkSheet No. 105

Solutions sheet No. 105			Mixed Reciprocal Trig Ratio - Find a Side 1 (degrees & minutes)					
Working using $H = \frac{O}{\sin A}$ or $H = \frac{O}{\cos A}$ or $A = \frac{O}{\tan A}$								
No.	Opp	Adj	Hyp	Angle	Equation	Calculator	1 Dec. Place	Solution
1	20	$a$		20°30'	$= 20/\tan 20^\circ 30'$	53.49243	53.5	$a = 53.5$
2	200		$b$	75°45'	$= 200/\sin 75^\circ 45'$	206.34918	206.3	$b = 206.3$
3	70	$c$		58°45'	$= 70/\tan 58^\circ 45'$	42.477043	42.5	$c = 42.5$
4	50	$d$		62°3'	$= 50/\tan 62^\circ 3'$	26.529529	26.5	$d = 26.5$
5		120	$e$	23°48'	$= 120/\cos 23^\circ 48'$	131.15332	131.2	$e = 131.2$
6	65		$f$	48°50'	$= 65/\sin 48^\circ 50'$	86.344545	86.3	$f = 86.3$
7	650	$g$		48°34'	$= 65/\tan 48^\circ 34'$	57.372451	57.4	$g = 57.4$
8		300	$h$	36°4'	$= 300/\cos 36^\circ 4'$	371.13439	371.1	$h = 371.1$
9	60	$i$		72°15'	$= 60/\tan 72^\circ 15'$	19.206151	19.2	$i = 19.2$
10		180	$j$	63°18'	$= 180/\cos 63^\circ 18'$	400.60625	400.6	$j = 400.6$
11	70		$k$	39°46'	$= 70/\sin 39^\circ 46'$	109.43269	109.4	$k = 109.4$
12		150	$l$	44°58'	$= 150/\cos 44^\circ 58'$	212.00873	212	$l = 212$
13	21.3		$m$	50°25'	$= 21.3/\sin 50^\circ 25'$	27.637262	27.6	$m = 27.6$
14	66	$n$		16°50'	$= 66/\tan 16^\circ 50'$	218.1438	218.1	$n = 218.1$
15	525		$p$	73°9'	$= 525/\sin 73^\circ 9'$	548.55099	548.6	$p = 548.6$
16		500	$q$	40°40'	$= 500/\cos 40^\circ 40'$	659.18398	659.2	$q = 659.2$
17	85		$r$	26°40'	$= 85/\sin 26^\circ 40'$	189.39429	189.4	$r = 189.4$
18	340		$s$	68°47'	$= 340/\sin 68^\circ 47'$	364.72133	364.7	$s = 364.7$
19	250		$t$	35°49'	$= 250/\sin 35^\circ 49'$	427.20906	427.2	$t = 427.2$
20	2400	$u$		80°15'	$= 2400/\tan 80^\circ 15'$	412.39542	412.4	$u = 412.4$