

Solutions for GeoWorkSheet No. 106

Solutions sheet No. 106			Mixed Reciprocal Trig Ratio - Find a Side 2 (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	60		a	47°40'	$a = 60/\sin 47^\circ 40'$	81.164502	81.2	$a = 81.2$
2	500		b	76°40'	$b = 500/\sin 76^\circ 40'$	513.85092	513.9	$b = 513.9$
3	90	c		54°25'	$c = 90/\tan 54^\circ 25'$	64.394081	64.4	$c = 64.4$
4		140	d	67°31'	$d = 140/\cos 67^\circ 31'$	366.09474	366.1	$d = 366.1$
5		170	e	21°51'	$e = 170/\cos 21^\circ 51'$	183.1578	183.2	$e = 183.2$
6		180	f	37°52'	$f = 180/\cos 37^\circ 52'$	228.00934	228	$f = 228$
7	175		g	78°15'	$g = 175/\sin 78^\circ 15'$	178.74553	178.7	$g = 178.7$
8		5.7	h	39°34'	$h = 5.7/\cos 39^\circ 34'$	7.3941091	7.4	$h = 7.4$
9	85	i		17°43'	$i = 85/\tan 17^\circ 43'$	266.07295	266.1	$i = 266.1$
10	800	j		70°48'	$j = 800/\tan 70^\circ 48'$	278.58948	278.6	$j = 278.6$
11	150		k	43°21'	$k = 150/\sin 43^\circ 21'$	218.51453	218.5	$k = 218.5$
12	1250		l	64°27'	$l = 1250/\sin 64^\circ 27'$	1385.4879	1385.5	$l = 1385.5$
13	195		m	58°26'	$m = 195/\sin 58^\circ 26'$	228.86474	228.9	$m = 228.9$
14	450	n		63°35'	$n = 450/\tan 63^\circ 35'$	223.54512	223.5	$n = 223.5$
15	240	p		22°32'	$p = 240/\tan 22^\circ 32'$	578.45916	578.5	$p = 578.5$
16		1200	q	36°30'	$q = 1200/\cos 36^\circ 30'$	1492.8031	1492.8	$q = 1492.8$
17	200	r		77°21'	$r = 200/\tan 77^\circ 21'$	44.888586	44.9	$r = 44.9$
18	125		s	24°50'	$s = 125/\sin 24^\circ 50'$	297.63312	297.6	$s = 297.6$
19	700		t	33°41'	$t = 700/\sin 33^\circ 41'$	1262.1655	1262.2	$t = 1262.2$
20	750	u		47°24'	$u = 750/\tan 47^\circ 24'$	81.164502	81.2	$u = 689.7$