

## Solutions for GeoWorkSheet No. 107

Solutions sheet No. 107			Mixed Trig Ratio and Reciprocal Ratio - Find a Side 1					
Working using $H = \frac{O}{\sin A}$ or $H = \frac{O}{\cos A}$ or $A = \frac{O}{\tan A}$ or $\sin A = \frac{O}{H}$ or $\cos A = \frac{A}{H}$ or $\tan A = \frac{O}{A}$								
No.	Opp	Adj	Hyp	Angle	Equation	Calculator	1 Dec. Place	Solution
1	$a$		50	$60^\circ$	$a = 50 \times \sin 60^\circ$	43.30127	43.3	$a = 43.3$
2		25	$b$	$28^\circ$	$b = 25 / \cos 28^\circ$	28.314251	28.3	$b = 28.3$
3	$c$	28		$42^\circ$	$c = 28 \times \tan 42^\circ$	25.211313	25.2	$c = 25.2$
4	32	$d$		$52^\circ$	$d = 32 / \tan 52^\circ$	25.00114	25	$d = 25$
5		55	$e$	$23^\circ$	$e = 55 / \cos 23^\circ$	59.749821	59.7	$e = 59.7$
6	$f$		27	$74^\circ$	$f = 27 \times \sin 74^\circ$	25.954066	26	$f = 26$
7	$g$	3.5		$36^\circ$	$g = 3.5 \times \tan 36^\circ$	2.5428988	2.5	$g = 2.5$
8	$h$	245		$26^\circ$	$h = 245 \times \tan 26^\circ$	119.49448	119.5	$h = 119.5$
9	6.8		$i$	$49^\circ$	$i = 6.8 / \sin 49^\circ$	9.0100884	9	$i = 9$
10	80		$j$	$71^\circ$	$j = 80 / \sin 71^\circ$	84.609654	84.6	$j = 84.6$
11	$k$		75	$43^\circ$	$k = 75 \times \sin 43^\circ$	51.149877	51.1	$k = 51.1$
12	$l$	0.7		$40^\circ$	$l = 0.7 \times \tan 40^\circ$	0.5873697	0.6	$l = 0.6$
13		$m$	21	$34^\circ$	$m = 21 \times \cos 34^\circ$	17.409789	17.4	$m = 17.4$
14	$n$		3.35	$68^\circ$	$n = 3.35 \times \sin 68^\circ$	3.1060659	3.1	$n = 3.1$
15	$p$	21		$56^\circ$	$p = 21 \times \tan 56^\circ$	31.13378	31.1	$p = 31.1$
16		115	$q$	$57^\circ$	$q = 115 / \cos 57^\circ$	211.14902	211.1	$q = 211.1$
17		2	$r$	$82^\circ$	$r = 2 / \cos 82^\circ$	14.370593	14.4	$r = 14.4$
18	3.8		$s$	$66^\circ$	$s = 3.8 / \sin 66^\circ$	4.1596179	4.2	$s = 4.2$
19		29	$t$	$44^\circ$	$t = 29 / \cos 44^\circ$	40.314744	40.3	$t = 40.3$
20	$u$		12.5	$52^\circ$	$u = 12.5 \times \sin 52^\circ$	9.8501344	9.9	$u = 9.9$