

Solutions for GeoWorkSheet No. 108

Solutions sheet No. 108			Mixed Trig Ratio and Reciprocal Ratio - Find a Side 2					
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	27		a	77°	$a = 27/\sin 77^\circ$	27.710211	27.7	$a = 27.7$
2		20	b	24°	$b = 20/\cos 24^\circ$	21.892726	21.9	$b = 21.9$
3	60	c		43°	$c = 60/\tan 43^\circ$	64.342123	64.3	$c = 64.3$
4	d	48		56°	$d = 48 \times \tan 56^\circ$	71.162926	71.2	$d = 71.2$
5		95	e	24°	$e = 95/\cos 24^\circ$	103.99045	104	$e = 104$
6	325		f	64°	$f = 325/\sin 64^\circ$	361.59563	361.6	$f = 361.6$
7	g	230		21°	$g = 230 \times \tan 21^\circ$	88.288728	88.3	$g = 88.3$
8		32	h	36°	$h = 32/\cos 36^\circ$	39.554175	39.6	$h = 39.6$
9		6.8	i	46°	$i = 6.8/\cos 46^\circ$	9.7889845	9.8	$i = 9.8$
10	80	j		71°	$j = 80/\tan 71^\circ$	27.546209	27.5	$j = 27.5$
11	k		160	44°	$k = 160 \times \sin 44^\circ$	111.14534	111.1	$k = 111.1$
12		0.7	l	42°	$l = 0.7/\cos 42^\circ$	0.9419429	0.9	$l = 0.9$
13		70	m	37°	$m = 70/\cos 37^\circ$	87.649496	87.6	$m = 87.6$
14	n	28		62°	$n = 28 \times \tan 62^\circ$	52.660341	52.7	$n = 52.7$
15	51		p	67°	$p = 51/\sin 67^\circ$	55.404379	55.4	$p = 55.4$
16	q	115		66°	$q = 115 \times \tan 66^\circ$	258.29423	258.3	$q = 258.3$
17	2		r	84°	$r = 2/\sin 84^\circ$	2.0110166	2	$r = 2$
18	s		6.4	68°	$s = 6.4 \times \sin 68^\circ$	5.9339767	5.9	$s = 5.9$
19		290	t	43°	$t = 290/\cos 43^\circ$	396.52496	396.5	$t = 396.5$
20	24.6		u	65°	$u = 24.6/\sin 65^\circ$	27.143097	27.1	$u = 27.1$