Solutions sheet No. 109				**Mixed Trig Ratio and Reciprocal Ratio - Find a Side 1 (DMS)**				
Working using $H = \frac{O}{sinA}$ or $H = \frac{O}{cosA}$ or $A = \frac{O}{tanA}$ 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		30	*a*	23°30'	*a* = 30/cos23°30'	32.713233	32.7	*a* = 32.7
2	*b*		75	76°45'	*b* = 75×sin76°45'	73.003444	73	*b* = 73
3	35	*c*		62°20'	*c* = 35/tan62°20'	18.349444	18.3	*c* = 18.3
4	*d*	24		43°12'	*d* = 24×tan43°12'	22.5375	22.5	*d* = 22.5
5	*e*		155	44°8'	*e* = 155×sin44°8'	107.93122	107.9	*e* = 107.9
6	*f*	5.6		38°46'	*f* = 5.6×tan38°46'	4.4971541	4.5	*f* = 4.5
7	*g*		60	64°53'	*g* = 60×sin64°53'	54.326722	54.3	*g* = 54.3
8	*h*	2000		18°52'	*h* = 2000×tan18°52'	683.45336	683.5	*h* = 683.5
9	65		*i*	46°29'	*i* = 65/sin46°29'	89.633647	89.6	*i* = 89.6
10	820		*j*	68°35'	*j* = 820/sin68°35'	880.82101	880.8	*j* = 880.8
11		45	*k*	20°23'	*k* = 45/cos20°23'	48.005973	48	*k* = 48
12	*l*	0.7		41°37'	*l* = 0.7×tan41°37'	0.6218533	0.6	*l* = 0.6
13		*m*	270	28°42'	*m* = 270×cos28°42'	236.82946	236.8	*m* = 236.8
14	*n*		15.3	61°16'	*n* = 15.25×sin61°16'	13.372216	13.4	*n* = 13.4
15	*p*	13		67°7'	*p* = 13×tan67°7'	30.800302	30.8	*p* = 30.8
16	35		*q*	69°6'	*q* = 35/sin69°6'	37.465031	37.5	*q* = 37.5
17		150	*r*	65°20'	*r* = 150/cos65°20'	359.42051	359.4	*r* = 359.4
18		24	*s*	83°22'	*s* = 24/cos83°22'	207.76513	207.8	*s* = 207.8
19		275	*t*	46°50'	*t* = 275/cos46°50'	401.97456	402	*t* = 402
20	*u*		1200	66°41'	*u* = 1200×sin66°41'	1101.9975	1102	*u* = 1102