

Solutions sheet No. 116				Sine Rule - Find an Angle 2 (degrees & minutes)				
Working using $a\sin A = b\sin B$								
No.	a	b	B	Angle	Equation	Calculator	Degrees	Solution
1	30	40	74°22'	<i>a</i>	$\sin a^\circ = 30(\sin 74^\circ 22')/40$	46.132662	46°8'	$a^\circ = 46^\circ 8'$
2	12	80	25°42'	<i>b</i>	$\sin b^\circ = 12(\sin 25^\circ 42')/80$	3.6345735	3°38'	$b^\circ = 3^\circ 38'$
3	20	17	47°55'	<i>c</i>	$\sin c^\circ = 20(\sin 47^\circ 55')/17$	59.363337	59°22'	$c^\circ = 59^\circ 22'$
4	48	56	70°26'	<i>d</i>	$\sin d^\circ = 48(\sin 70^\circ 26')/56$	53.653816	53°39'	$d^\circ = 53^\circ 39'$
5	180	125	28°44'	<i>e</i>	$\sin e^\circ = 180(\sin 28^\circ 44')/125$	42.534891	42°32'	$e^\circ = 42^\circ 32'$
6	32	25	38°47'	<i>f</i>	$\sin f^\circ = 32(\sin 38^\circ 47')/25$	52.003344	52°0'	$f^\circ = 52^\circ 0'$
7	6.2	8.9	82°17'	<i>g</i>	$\sin g^\circ = 6.2(\sin 82^\circ 17')/8.9$	43.61821	43°37'	$g^\circ = 43^\circ 37'$
8	23	29	74°52'	<i>h</i>	$\sin h^\circ = 23(\sin 74^\circ 52')/29$	49.674462	49°40'	$h^\circ = 49^\circ 40'$
9	42	50	71°41'	<i>i</i>	$\sin i^\circ = 42(\sin 71^\circ 41')/50$	52.583116	52°35'	$i^\circ = 52^\circ 35'$
10	55	40	33°58'	<i>j</i>	$\sin j^\circ = 55(\sin 33^\circ 58')/40$	48.493338	48°30'	$j^\circ = 48^\circ 30'$
11	200	110	24°51'	<i>k</i>	$\sin k^\circ = 200(\sin 24^\circ 51')/110$	47.690642	47°41'	$k^\circ = 47^\circ 41'$
12	12	9	44°18'	<i>l</i>	$\sin l^\circ = 12(\sin 44^\circ 18')/9$	67.851702	67°51'	$l^\circ = 67^\circ 51'$
13	75	70	58°51'	<i>m</i>	$\sin m^\circ = 75(\sin 58^\circ 51')/70$	65.315743	65°19'	$m^\circ = 65^\circ 19'$
14	17	16	57°19'	<i>n</i>	$\sin n^\circ = 17(\sin 57^\circ 19')/16$	63.010219	63°1'	$n^\circ = 63^\circ 1'$
15	10.3	12.7	76°24'	<i>p</i>	$\sin p^\circ = 10.3(\sin 76^\circ 24')/12.7$	51.899789	51°54'	$p^\circ = 51^\circ 54'$
16	25.6	19.7	38°24'	<i>q</i>	$\sin q^\circ = 25.6(\sin 38^\circ 24')/19.7$	53.134629	53°8'	$q^\circ = 53^\circ 8'$
17	22	24	76°47'	<i>r</i>	$\sin r^\circ = 22(\sin 76^\circ 47')/24$	62.80268	62°48'	$r^\circ = 62^\circ 48'$
18	9	14	82°31'	<i>s</i>	$\sin s^\circ = 9(\sin 82^\circ 31')/14$	39.538822	39°32'	$s^\circ = 39^\circ 32'$
19	33	35	53°26'	<i>t</i>	$\sin t^\circ = 33(\sin 53^\circ 26')/35$	48.85085	48°51'	$t^\circ = 48^\circ 51'$
20	32	38	69°18'	<i>u</i>	$\sin u^\circ = 32(\sin 69^\circ 18')/38$	51.829296	51°50'	$u^\circ = 51^\circ 50'$