

Solutions sheet No. 112				Sine Rule - Find an Angle 1				
Working using $a\sin A = b\sin B$								
No.	a	b	A	Angle	Equation	Calculator	Degrees	Solution
1	9	12	42	a	$\sin a^\circ = 9\sin 42^\circ/12$	30.122335	30°	$a^\circ = 30^\circ$
2	20	22	74	b	$\sin b^\circ = 20\sin 74^\circ/22$	60.912024	60°	$b^\circ = 60^\circ$
3	25	30	48	c	$\sin c^\circ = 25\sin 48^\circ/30$	38.264112	38°	$c^\circ = 38^\circ$
4	9	16	28	d	$\sin d^\circ = 9\sin 28^\circ/16$	15.31216	15°	$d^\circ = 15^\circ$
5	40	60	34	e	$\sin e^\circ = 40\sin 34^\circ/60$	21.888112	21°	$e^\circ = 21^\circ$
6	17	16	58	f	$\sin f^\circ = 17\sin 58^\circ/16$	64.296576	64°	$f^\circ = 64^\circ$
7	70	100	29	g	$\sin g^\circ = 70\sin 29^\circ/100$	19.838297	19°	$g^\circ = 19^\circ$
8	38	35	55	h	$\sin h^\circ = 38\sin 55^\circ/35$	62.793571	62°	$h^\circ = 62^\circ$
9	26	34	42	i	$\sin i^\circ = 26\sin 42^\circ/34$	30.77634	30°	$i^\circ = 30^\circ$
10	160	240	31	j	$\sin j^\circ = 160\sin 31^\circ/240$	20.081638	20°	$j^\circ = 20^\circ$
11	18.9	19.4	78	k	$\sin k^\circ = 18.9\sin 78^\circ/19.4$	72.352112	72°	$k^\circ = 72^\circ$
12	40	43	73	l	$\sin l^\circ = 40\sin 73^\circ/43$	62.821247	62°	$l^\circ = 62^\circ$
13	5.8	7.3	58	m	$\sin m^\circ = 5.8\sin 58^\circ/7.3$	42.360384	42°	$m^\circ = 42^\circ$
14	120	132	75	n	$\sin n^\circ = 120\sin 75^\circ/132$	61.415733	61°	$n^\circ = 61^\circ$
15	12.8	15.2	66	p	$\sin p^\circ = 12.8\sin 66^\circ/15.2$	50.2912	50°	$p^\circ = 50^\circ$
16	9.2	12.2	36	q	$\sin q^\circ = 9.2\sin 36^\circ/12.2$	26.311294	26°	$q^\circ = 26^\circ$
17	75	78	74	r	$\sin r^\circ = 75\sin 74^\circ/78$	67.561549	67°	$r^\circ = 67^\circ$
18	250	275	78	s	$\sin s^\circ = 250\sin 78^\circ/275$	62.776033	62°	$s^\circ = 62^\circ$
19	11.4	13	72	t	$\sin t^\circ = 11.4\sin 72^\circ/13$	56.512208	56°	$t^\circ = 56^\circ$
20	3.8	3.6	68	u	$\sin u^\circ = 3.8\sin 68^\circ/3.6$	78.151537	78°	$u^\circ = 78^\circ$