

The Laws of Triangles

Fill in the missing side(s) and angle(s) as well as the area of each triangle. The Case gives the information for each triangle.

	Case	a	b	c	A	B	C	Area
1.	SAS	3	4				$71^{\circ}40'$	
2.	SAS	100	210				$113^{\circ}20'$	
3.	SSS	8	9	7				
4.	SSS	3	6	4				
5.	ASA			50	$11^{\circ}30'$	$27^{\circ}40'$		
6.	AAS	6			$56^{\circ}20'$	$64^{\circ}30'$		
7.	SSA	5	7		$25^{\circ}50'$			
8.	SSA	10	6		$144^{\circ}50'$			
9.	?	8	5					10.6477

Answers

	<i>a</i>	<i>b</i>	<i>c</i>	<i>A</i>	<i>B</i>	<i>C</i>	Area
1.	X	X	4.177	42°59'	65°21'	X	5.695
2.	X	X	266	20°15'	46°28'	X	9641
3.	X	X	X	58°25'	73°24'	48°11'	26.83
4.	X	X	X	26°23'	117°17'	36°20'	5.333
5.	15.78	36.76	X	X	X	140°50'	183.2
6.	X	6.507	6.190	X	X	59°10'	16.76
7.	X	X	10.26 or 2.339	X	37°36' or 142°24'	116°34' or 11°46'	15.65 or 3.567
8.	X	X	4.479	X	20°13'	14°57'	7.739
	X	X	X	X	X	X	X
9.	X	X	4.613	112°35'	35°15'	32°10'	X