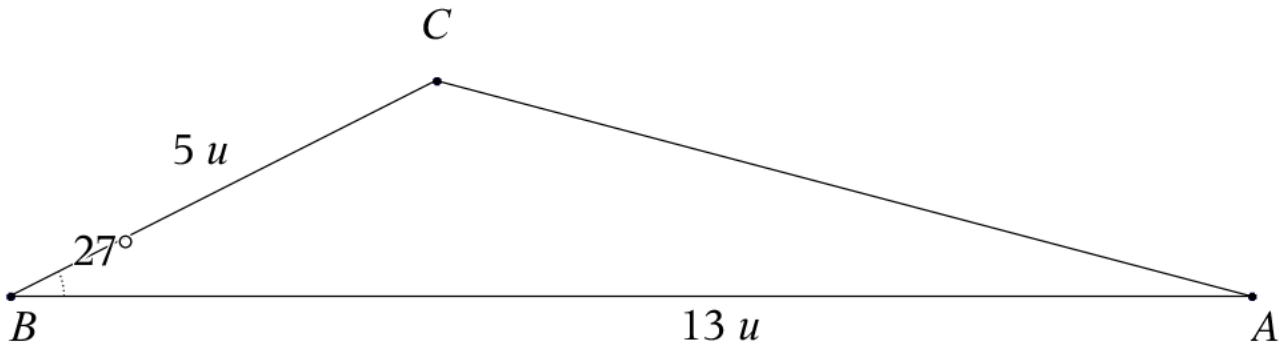
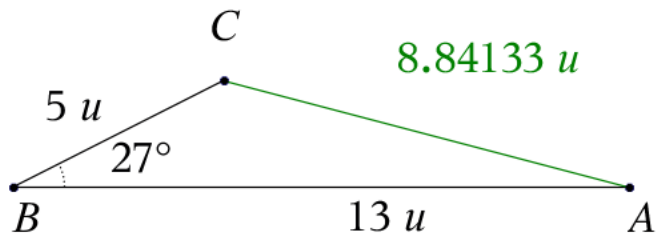
version SAS 5/13 angle 27 degrees

	A x_list	B y_list	C	D	E	F	G	H	I	J	K	L	M
=													
1	0	0	side_a	**5**									
2	4.45503	2.26995	side_c	**13**									
3	13.	0	angle_b	**27**									
4			side_b	**8.84133**									
5			sin_a	**0.256743**									
6			angle_a	**14.8769**									
7			angle_c	**138.123**									
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													

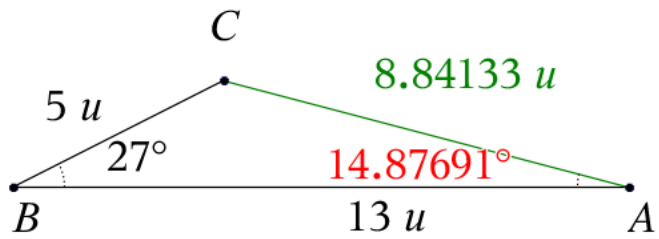
A1 0


C
5 u
27°
B
13 u
A



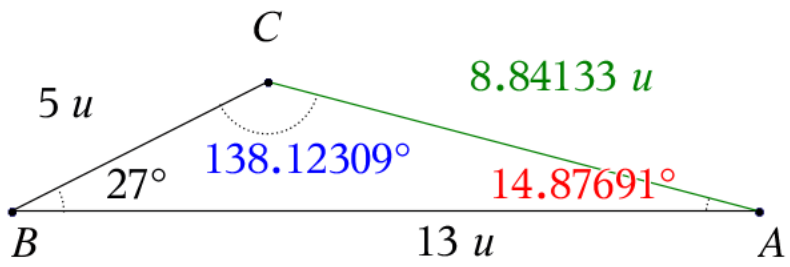
Step 1: Find Missing Side

This requires law of cosines



Step 2: Find the smallest angle

(I would use law of cosines any time I had three sides, but you can use law of cosines)



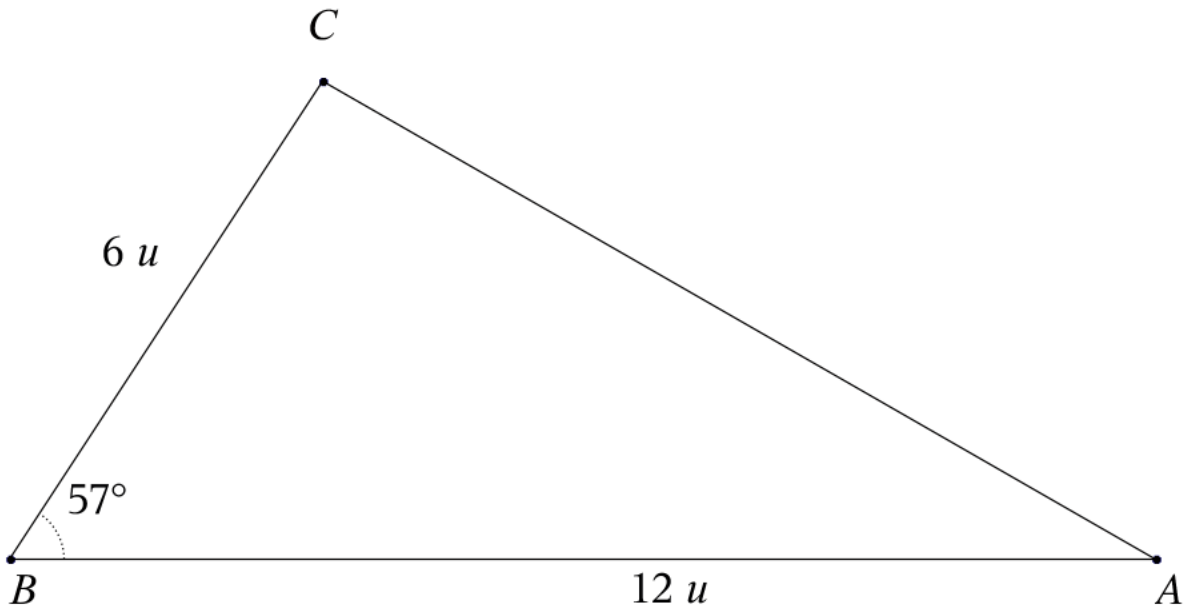
Step 3: Find the last angle

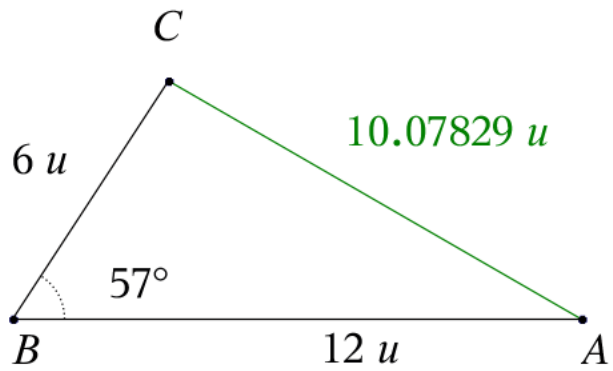
(I would use triangle angle sum, or law of cosines any time I had three sides, but you can also use law of cosines)

version SAS 6/12 angle 57 degrees

	A x_list	B y_list	C	D	E	F	G	H	I	J	K	L	M
=													
1	0	0	side_a	**6**									
2	3.26783	5.03202	side_c	**12**									
3	12.	0	angle_b	**57**									
4			side_b	**10.0783**									
5			sin_a	**0.499293**									
6			angle_a	**29.9533**									
7			angle_c	**93.0467**									
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													

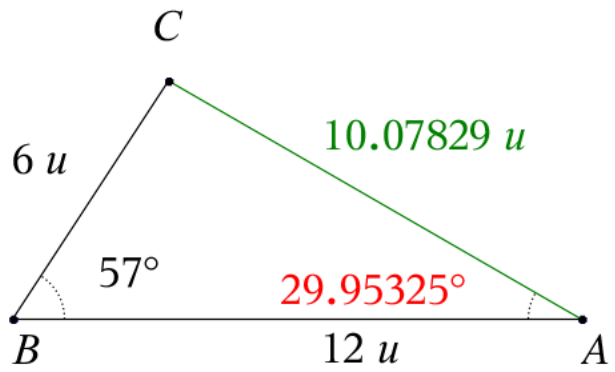
A1 0


C
6 u
57°
B
12 u
A



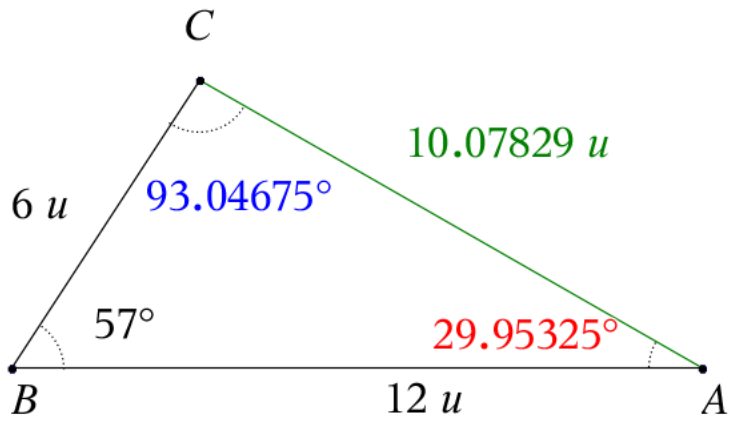
Step 1: Find Missing Side

This requires law of cosines



Step 2: Find the smallest angle

(I would use law of cosines any time I had three sides, but you can use law of cosines)



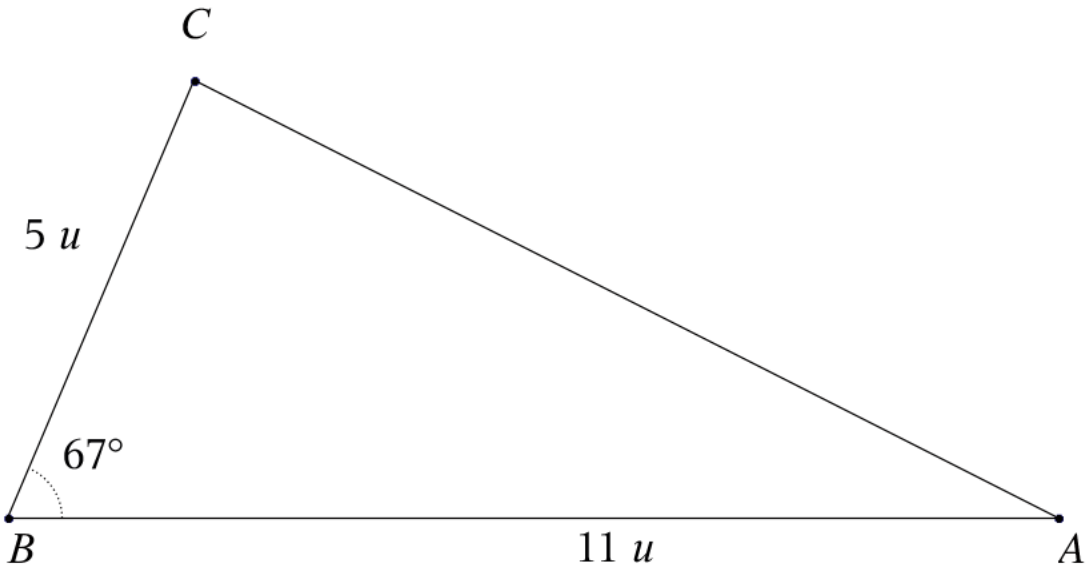
Step 3: Find the last angle

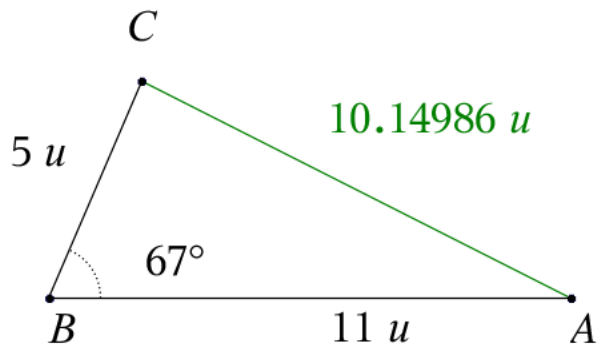
(I would use triangle angle sum, or law of cosines any time I had three sides, but you can also use law of sines)

version SAS 5/11 angle 67 degrees

	A x_list	B y_list	C	D	E	F	G	H	I	J	K	L	M
=													
1	0	0	side_a	**5**									
2	1.95366	4.60252	side_c	**11**									
3	11.	0	angle_b	**67**									
4			side_b	**10.1499**									
5			sin_a	**0.453457**									
6			angle_a	**26.9657**									
7			angle_c	**86.0343**									
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													

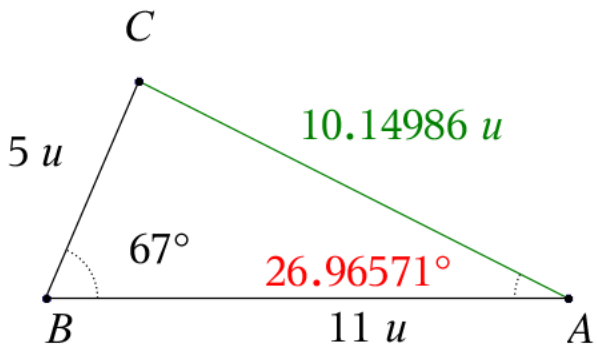
Al 0


C
5 u
67°
B
11 u
A



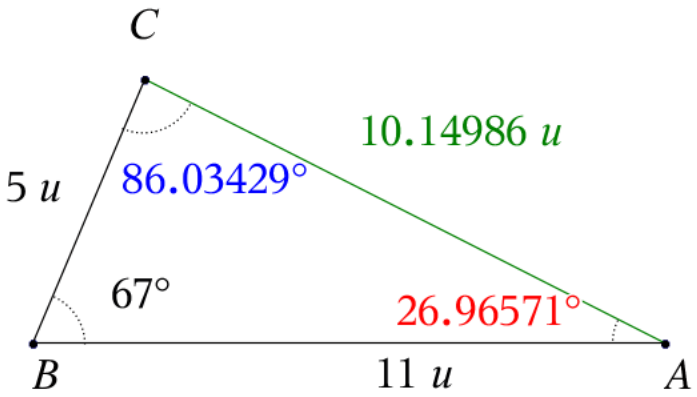
Step 1: Find Missing Side

This requires law of cosines



Step 2: Find the smallest angle

(I would use law of cosines any time I had three sides, but you can use law of cosines)



Step 3: Find the last angle

(I would use triangle angle sum, or law of cosines any time I had three sides, but you can also use law of sines)