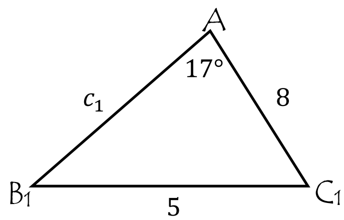
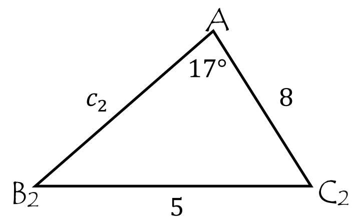
When you find yourself face-to-face with the "ambiguous case" solve as if there ARE two triangles.

I know this is the ambiguous case because I'm given SSA (the angle is not included between the two sides).

$\angle A = 17°$; $a = 5$ & $b = 8$	 	
Use the Law of Sines to find $m\angle B$.	$\frac{\sin 17°}{5} = \frac{\sin B}{8}$ $\sin B = \frac{8 \sin 17°}{5} = 0.46779$ $B = \sin^{-1} 0.46779$	
Sine is positive in Quadrants I & II, so there's a second possible measure for $\angle B$, find it by subtracting from 180°.	$B_1 = 27.9°$	$B_2 = 180° - 27.9° = 152.1°$
The sum of all 3 angles of any triangle is 180°. Find the third angle by subtracting the two known angles from 180°.	$C_1 = 180 - 17 - 27.9 = 135.1°$	$C_2 = 180 - 17 - 152.1 = 10.9°$ **There IS a second triangle.**
Finish solving the triangle using the Law of Sines to find side c_1 & c_2.	$\frac{\sin 17°}{5} = \frac{\sin 135.1°}{c_1}$ $c_1 \cdot \sin 17° = 5 \sin 135.1°$ $c_1 = \frac{5 \sin 135.1°}{\sin 17°} \approx 12.07$	$\frac{\sin 17°}{5} = \frac{\sin 10.9°}{c_2}$ $c_2 \cdot \sin 17° = 5 \sin 10.9°$ $c_2 = \frac{5 \sin 10.9°}{\sin 17°} \approx 3.23$