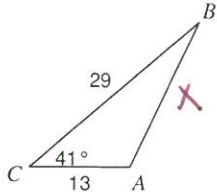


The Law of Cosines

Find each measurement indicated. Round your answers to the nearest tenth.

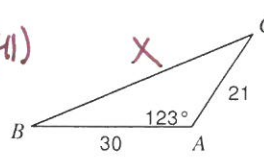
1) Find AB



$$x^2 = 13^2 + 29^2 - 2(13)(29)\cos(41)$$

$$AB = 21$$

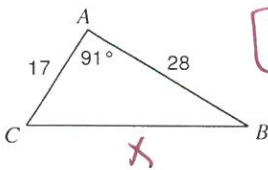
2) Find BC



$$x^2 = 30^2 + 21^2 - 2(30)(21)\cos(123)$$

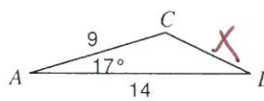
$$BC = 45$$

3) Find BC



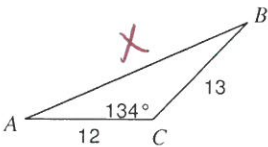
$$BC = 33$$

4) Find BC



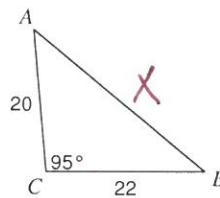
$$BC = 6$$

5) Find AB



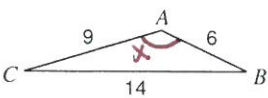
$$AB = 23$$

6) Find AB



$$AB = 31$$

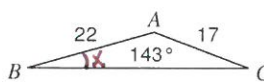
7) Find $m\angle A$



$$14^2 = 9^2 + 6^2 - 2(9)(6)\cos(x)$$

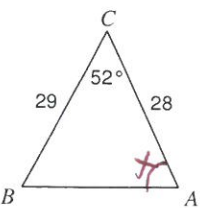
$$m\angle A = 137^\circ$$

8) Find $m\angle B$



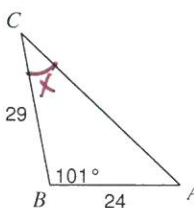
$$m\angle B = 16^\circ$$

9) Find $m\angle A$



$$m\angle A = 69^\circ$$

10) Find $m\angle C$



$$m\angle C = 35^\circ$$