

Name :

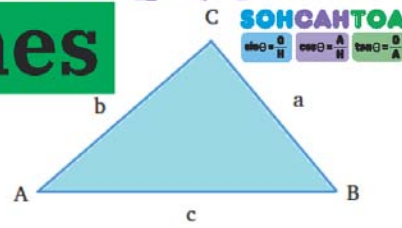
Class :



# Law of Cosines



This law states that relation between the lengths of sides of a triangle with respect to the cosine of its angle



**SOHCAHTOA**  
sin θ =  $\frac{O}{H}$     cos θ =  $\frac{A}{H}$     tan θ =  $\frac{O}{A}$

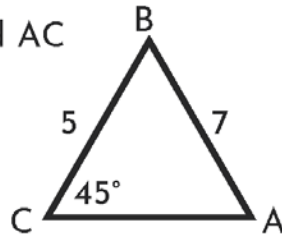
$$a^2 = b^2 + c^2 - 2bc \cos(A)$$

$$b^2 = a^2 + c^2 - 2ac \cos(B)$$

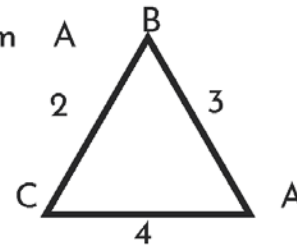
$$c^2 = a^2 + b^2 - 2ab \cos(C)$$

Using law of cosines find the each measurement indicated.

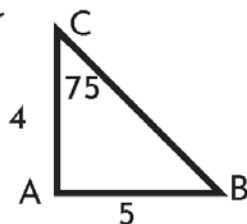
1) Find AC



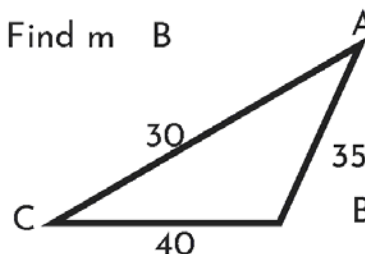
2) Find m



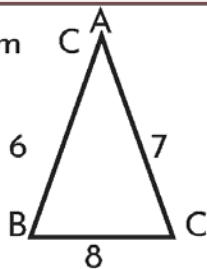
3) Find BC



4) Find m



5) Find m



6) Find AB

