

Laws of Sin and Cosine

Laws of Sins: $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$

Laws of Cosines: $a^2 = b^2 + c^2 - 2bc\cos A$

OR $\cos A = \frac{b^2 + c^2 - a^2}{2bc}$

aBC		
	ASA	
		Cos

1. Find all the missing sides and Angles

$A = 32^\circ$

$a =$

$B =$

$b = 80.1\text{cm}$

$C = 66.2^\circ$

$c =$

2. Find side b

$A = 48^\circ$

$b =$

$B = 105^\circ$

$c = 110$

$C =$

3. Find side all missing sides and angles

$$A = \quad \quad \quad a = 423\text{cm}$$

$$B = \quad \quad \quad b = 259\text{cm}$$

$$C = 132.6667^\circ \quad c =$$

4. Find angle A

$$A = \quad \quad \quad a = 20\text{in}$$

$$b = 12\text{in}$$

$$c = 18\text{in}$$