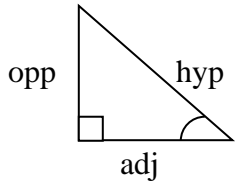


So you have a trig problem...



Use Soh-Cah-Toa

What do you have to find?

Angle

$$\theta = \text{Sin}^{-1} \left[\frac{\text{opp}}{\text{hyp}} \right]$$

$$\theta = \text{Cos}^{-1} \left[\frac{\text{adj}}{\text{hyp}} \right]$$

$$\theta = \text{Tan}^{-1} \left[\frac{\text{opp}}{\text{adj}} \right]$$

Side

$$\text{Sin } \theta = \frac{\text{opp}}{\text{hyp}}$$

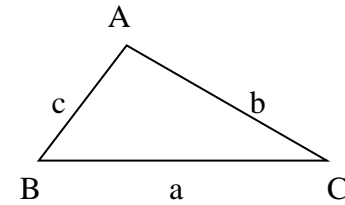
$$\text{Cos } \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\text{Tan } \theta = \frac{\text{opp}}{\text{adj}}$$

Do you have a right triangle?

yes

no



Do you know an angle and the opposite side?

yes

no

Use the Sine Law

What do you have to find?

Angle

$$\frac{\text{Sin}A}{a} = \frac{\text{Sin}B}{b}$$

$$\text{Sin } A = \left[\frac{\text{Sin}B}{b} \times a \right]$$

Side

$$\frac{a}{\text{Sin}A} = \frac{b}{\text{Sin}B}$$

$$a = \frac{b}{\text{Sin}B} \times \text{Sin}A$$

Use the Cosine Law

What do you have to find?

Angle

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

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

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

Side

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

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

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

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

☺ *Hint: Remember to... Sketch... State... Solve... Sentence*