

$$A = 23^\circ \quad a = 8$$

$$B = 67^\circ \quad b = 18.8$$

$$C = 90^\circ \quad c = 20.5$$

$$\tan \theta = \frac{\text{Opp}}{\text{adj}}$$

$$\tan A = \frac{a}{b}$$

$$\tan 23^\circ = \frac{8}{b}$$

$$b \cdot \tan 23^\circ = 8$$

$$b = \frac{8}{\tan 23^\circ}$$

$$b = \frac{8}{.4245} = 18.8$$

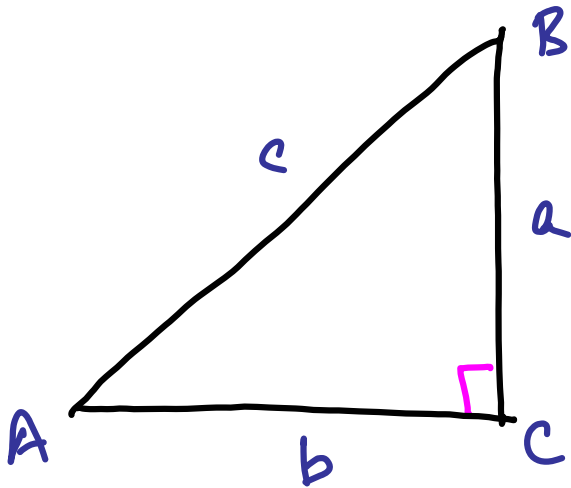
$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\sin 23^\circ = \frac{8}{c}$$

$$c \cdot \sin 23^\circ = 8$$

$$c = \frac{8}{\sin 23^\circ}$$

$$c = 20.5$$



$$\underline{A = 30^\circ} \quad a = 4$$

$$\underline{B = 60^\circ} \quad b = 7$$

$$C = 90^\circ \quad \underline{c = 8.1}$$

$$4^2 + 7^2 = c^2$$

$$16 + 49 = c^2$$

$$c^2 = 65$$

$$c \approx 8.1$$

$$\tan B = \frac{7}{4}$$

$$\tan B \approx 1.75$$

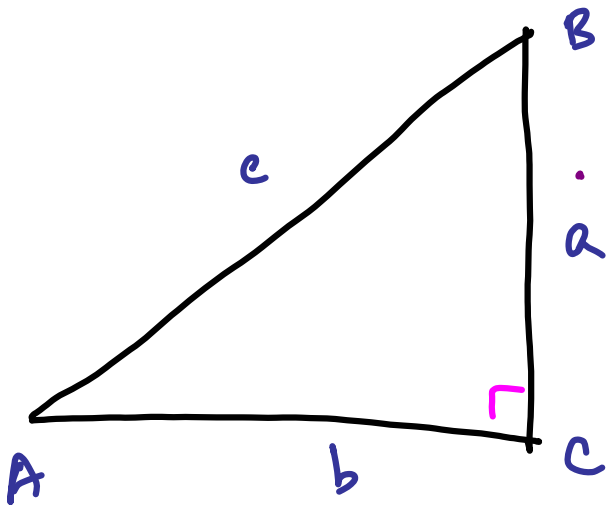
$$B \approx 60^\circ$$

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

$$\tan A = \frac{4}{7}$$

$$\tan A \approx .5714$$

$$A \approx 30^\circ$$



$$A = 42^\circ \quad \underline{a = 9.0}$$

$$B = 48^\circ \quad b = 10$$

$$C = 90^\circ \quad \underline{c = 13.5}$$

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

$$\tan 42^\circ = \frac{a}{10}$$

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

$$10 \cdot \tan 42^\circ = a$$

$$10 (.9004) = a$$

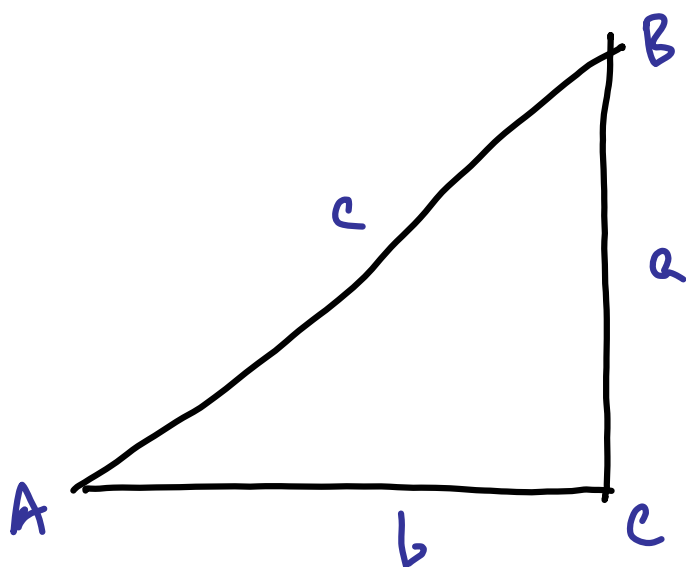
$$a = 9.004$$

$$\cos 42^\circ = \frac{10}{c}$$

$$c \cdot \cos 42^\circ = 10$$

$$c = \frac{10}{\cos 42^\circ}$$

$$c = 13.5$$



$$A = 23^\circ \quad \underline{a = 15.6}$$

$$B = 67^\circ \quad \underline{b = 36.8}$$

$$C = 90^\circ \quad c = 40$$

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

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

$$\cos 23^\circ = \frac{b}{40}$$

$$40 \cos 23^\circ = b$$

$$b = 36.8$$

$$\sin 23^\circ = \frac{a}{40}$$

$$a = 40 \cdot \sin 23^\circ$$

$$a = 15.6$$