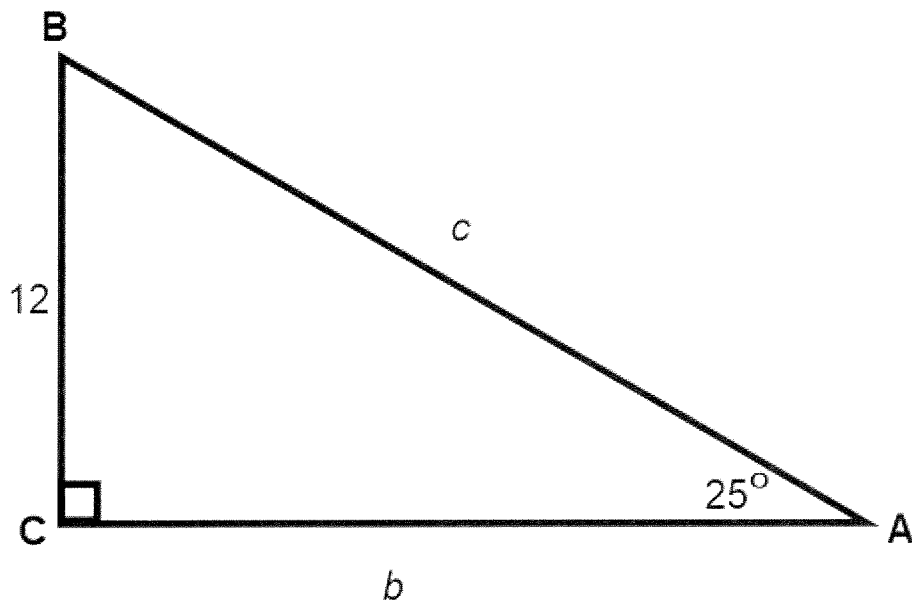


**Math 112: #6 A/B**

1. Solve the triangle (find the missing angle and sides).



$$\bullet \angle B = 90^\circ - 25^\circ = 65^\circ$$

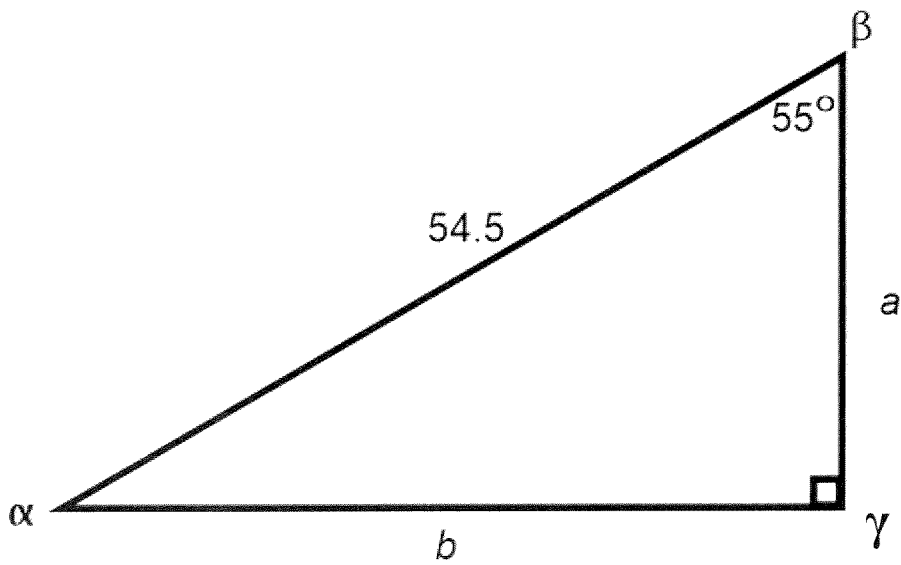
$$\bullet \sin 25^\circ = \frac{12}{c}$$

$$c = \frac{12}{\sin 25^\circ} = 28.39$$

$$\bullet \tan 25^\circ = \frac{12}{b}$$

$$b = \frac{12}{\tan 25^\circ} = 25.73$$

2. Solve the triangle (find the missing angle and sides).



- $\alpha = 90^\circ - 55^\circ = 35^\circ$

- $\sin 55^\circ = \frac{b}{54.5}$

$$54.5 \sin 55^\circ = b = 44.64$$

- $\cos 55^\circ = \frac{a}{54.5}$

$$54.5 \cos 55^\circ = a = 31.26$$