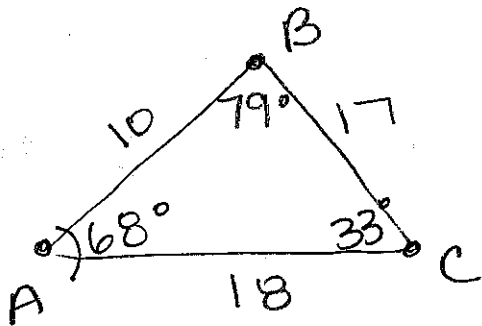


Warm-up: Solve triangle ABC given:

$$a = 17, b = 18 \text{ \& } B = 79^\circ$$

(round to the tenth)



$$\textcircled{1} \frac{a}{\sin A} = \frac{b}{\sin B}$$

$$\frac{17}{\sin A} = \frac{18}{\sin 79^\circ}$$

$$\frac{18 \sin A}{18} = \frac{17 \sin 79^\circ}{18}$$

$$\sin A = \frac{17 \sin 79^\circ}{18}$$

$$A = \sin^{-1} \left(\frac{17 \sin 79^\circ}{18} \right)$$

$$\boxed{A = 68^\circ}$$

$$\textcircled{2} C = 180 - 79 - 68 = \boxed{33^\circ}$$

$$\textcircled{3} \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{18}{\sin 79^\circ} = \frac{c}{\sin 33^\circ}$$

$$\frac{c \sin 79^\circ}{\sin 79^\circ} = \frac{18 \sin 33^\circ}{\sin 79^\circ}$$

$$\boxed{c = 10}$$