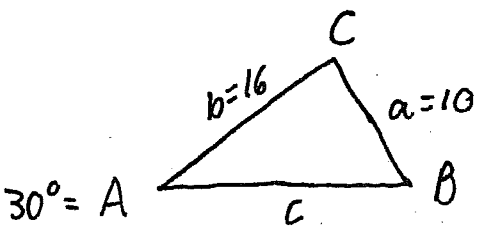
Solve the triangle with $A = 30^\circ$, $b = 16$, $a = 10$



Using Law of Sines:

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

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

$$\sin B = \frac{16 \sin 30^\circ}{10}$$

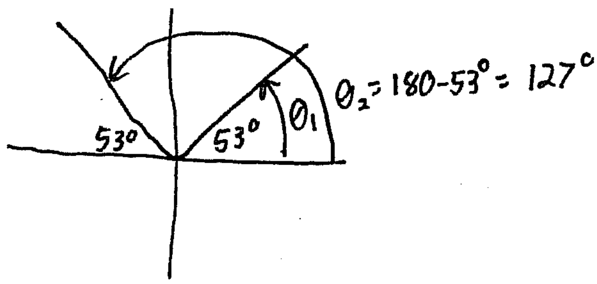
$$\sin B = \frac{16\left(\frac{1}{2}\right)}{10}$$

$$\sin B = \frac{8}{10}$$

$$B = \arcsin\left(\frac{8}{10}\right)$$

$$= 53^\circ$$

Note that sine is positive in the first two quadrants.

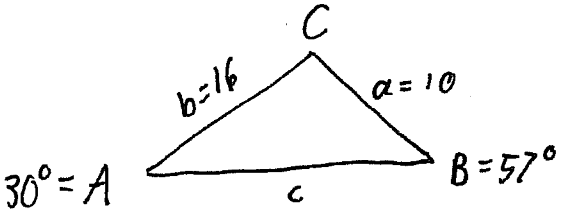


$\therefore$ there are two possible solution for B since

$$A + B = 30^\circ + 53^\circ < 180^\circ$$

and $A + B = 30^\circ + 127^\circ < 180^\circ$

If $B = 53^\circ$ then



$$C = 180^\circ - 57^\circ - 30^\circ = 93^\circ$$

Lets solve for c using Law of Sines

$$\frac{a}{\sin A} = \frac{c}{\sin C}$$

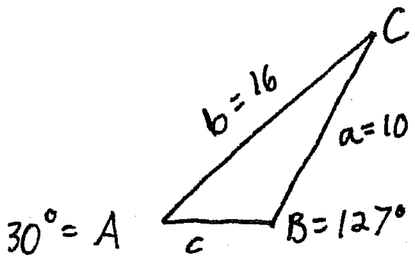
$$c = \frac{a \sin C}{\sin A}$$

$$c = \frac{10 \sin 93^\circ}{\sin 30^\circ}$$

$$c = \frac{10 \sin 93^\circ}{\left(\frac{1}{2}\right)}$$

$$c = 20$$

If $B = 127^\circ$ then



$C = 180^\circ - 30^\circ - 127^\circ = 23^\circ$

Lets solve for c using Law of Sines

$$\frac{a}{\sin A} = \frac{c}{\sin C}$$

$$c = \frac{a \sin C}{\sin A}$$

$$c = \frac{10 \sin 23^\circ}{\sin 30^\circ}$$

$$c = 8$$