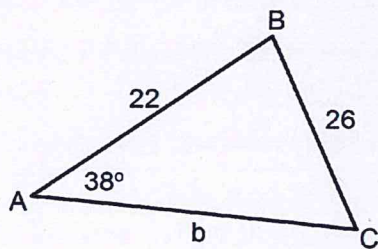


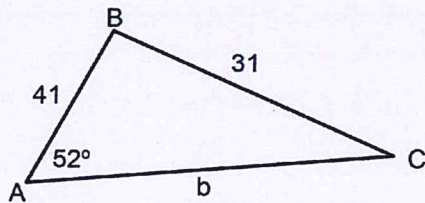
Bellwork Alg 2B Monday, June 4, 2018

Solve each triangle. Give all possible answers rounded to the nearest hundredth.

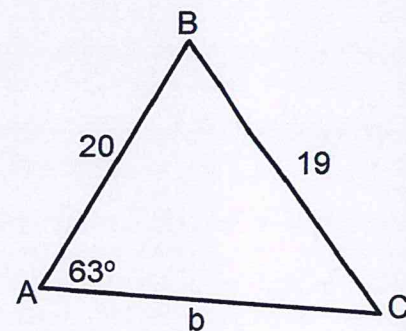
1.



2.



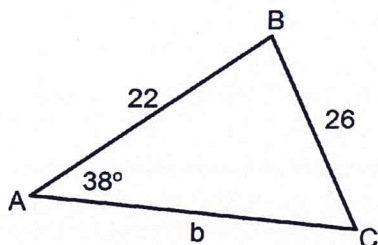
3.



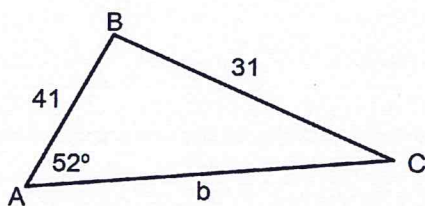
Bellwork Alg 2B Monday, June 4, 2018

Solve each triangle. Give all possible answers rounded to the nearest hundredth.

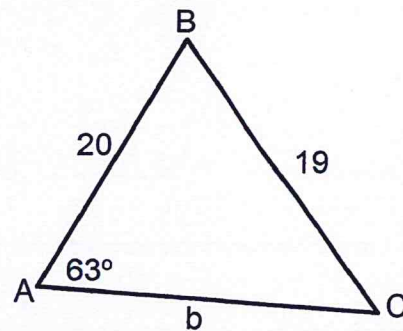
1.

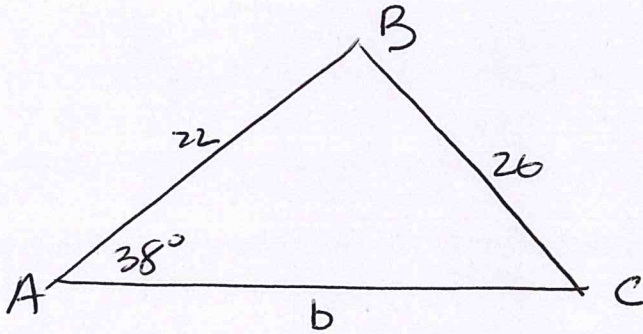


2.



3.





$$\frac{\sin 38^\circ}{26} = \frac{\sin C}{22}$$

$$\sin C = \left(\frac{22 \cdot \sin 38^\circ}{26} \right)$$

$$LC = \sin^{-1} \left(\frac{22 \cdot \sin 38^\circ}{26} \right)$$

$$LC = 31.40^\circ$$

$$LB = 180 - 38 - 31.40 = 110.60^\circ$$

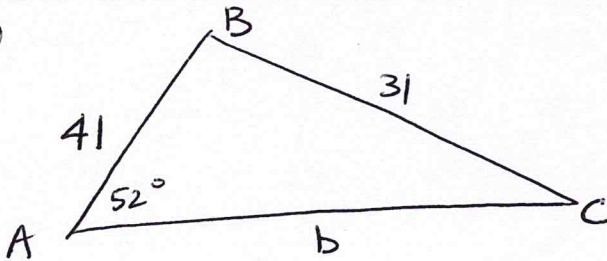
$$b = 39.53$$

$$LC = 31.40^\circ \text{ \& } 148.60^\circ$$

THIS ISN'T POSSIBLE

$$\frac{\sin 38^\circ}{26} = \frac{\sin 110.6^\circ}{b}$$

(2)



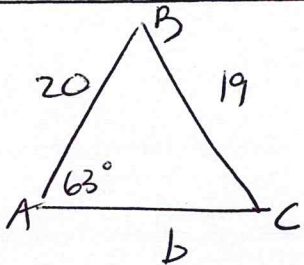
$$\frac{\sin 52^\circ}{31} = \frac{\sin C}{41}$$

$$\sin C = \frac{41 \sin 52^\circ}{31} = 1.04$$

THIS IS NOT POSSIBLE

THIS ISN'T A TRIANGLE

(3)



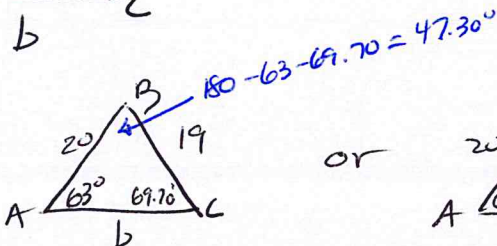
$$\frac{\sin 63^\circ}{19} = \frac{\sin C}{20}$$

$$\sin C = \frac{20 \sin 63^\circ}{19}$$

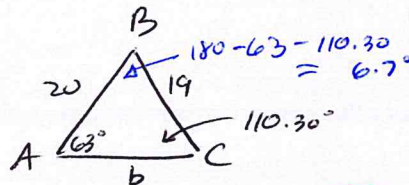
$$LC = \sin^{-1} \left(\frac{20 \sin 63^\circ}{19} \right)$$

$$LC = 69.70^\circ \text{ \& } 110.30^\circ$$

BOTH are possible



or



$$LC = 69.70^\circ$$

$$LB = 47.30^\circ$$

$$b = 15.67$$

or

$$LC = 110.30^\circ$$

$$LB = 6.7$$

$$b = 2.49$$

$$\frac{\sin 63^\circ}{19} = \frac{\sin 6.7^\circ}{b}$$

$$\frac{\sin 63^\circ}{19} = \frac{\sin 47.30^\circ}{b}$$