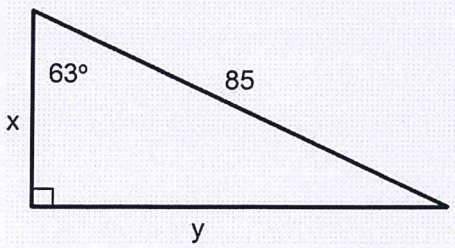
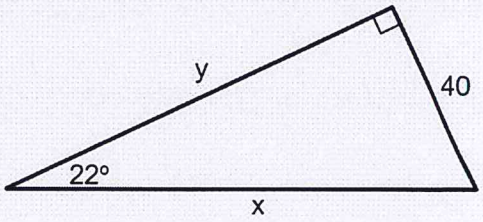
Bellwork Alg 2 Wednesday, March 13, 2019

Find the value of x and y in each triangle to the nearest hundredth.

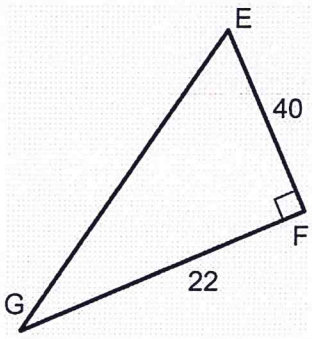
1.



2.



3. Solve this triangle. This means to find all missing sides and angles. Round to the nearest hundredth.



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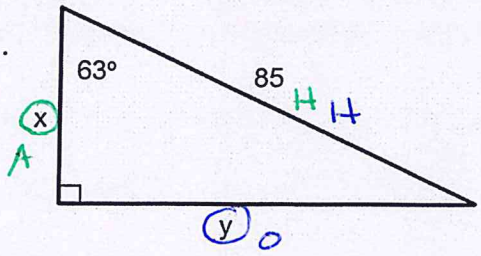
Answers

Find the value of x and y in each triangle to the nearest hundredth.

1.



For x: use cos

$85 \cdot \cos 63^\circ = \frac{x}{85} \cdot 85$

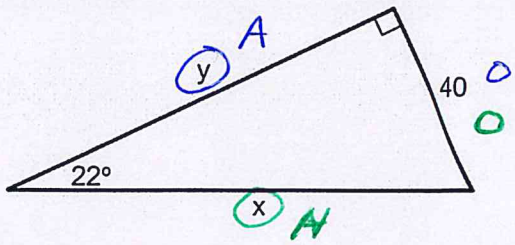
$x = 38.59$

For y use sin

$85 \cdot \sin 63^\circ = \frac{y}{85} \cdot 85$

$y = 75.74$

2.



For x: use sin

$\frac{\sin 22^\circ}{1} = \frac{40}{x}$ cross multiply

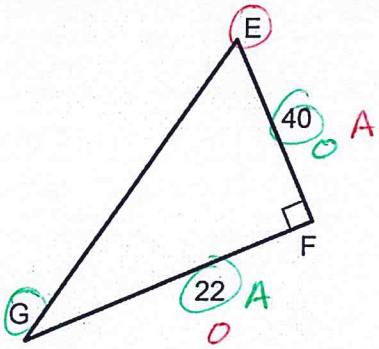
$x = 106.75$

For y: use Tan

$\frac{\tan 22^\circ}{1} = \frac{40}{y}$ cross multiply

$y = 99.00$

3. Solve this triangle. This means to find all missing sides and angles. Round to the nearest hundredth.



* TO FIND EG USE PYTHAGOREAN THEOREM

$40^2 + 22^2 = (EG)^2$

$\sqrt{2084} = \sqrt{(EG)^2}$

$EG = 45.65$

* TO FIND $\angle G$ use tan

$\tan G = \frac{40}{22}$

$\angle G = \tan^{-1}\left(\frac{40}{22}\right)$

$\angle G = 61.19^\circ$

* TO FIND $\angle E$ use Tan

$\tan E = \frac{22}{40}$

$\angle E = \tan^{-1}(22/40)$

$\angle E = 28.81^\circ$