

Ch 10.6 Solving Right Triangles

Formulas: used to find a leg of a triangle
 $\text{leg}^2 + \text{leg}^2 = \text{hyp}^2$

$$\tan \angle = \frac{\text{opp}}{\text{adj}}$$

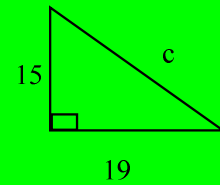
$$\sin \angle = \frac{\text{opp}}{\text{hyp}}$$

$$\cos \angle = \frac{\text{adj}}{\text{hyp}}$$

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Ex1a) Find c:

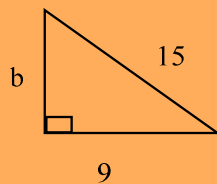
*round to the tenths.



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Ex1b) Find b:

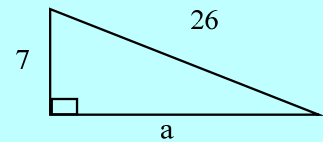
*round to the tenths.



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Try #1) Find a:

*round to the tenths.



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Formulas to solve for the angles of a triangle: **use inverse buttons**

$$\tan^{-1} = \frac{\text{opp}}{\text{adj}}$$

$$\sin^{-1} = \frac{\text{opp}}{\text{hyp}}$$

$$\cos^{-1} = \frac{\text{adj}}{\text{hyp}}$$

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Ex2) use your calculator to find $\angle A$. (use inverse button and ask if it makes sense???)

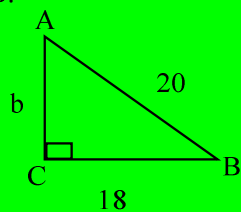
a) $\sin \angle A = 0.3112$

b) $\cos \angle A = 0.4492$

c) $\tan \angle A = 1.265$

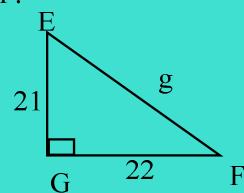
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Ex3a) Find b , $\angle A$, and $\angle B$:
 *round to the tenths.



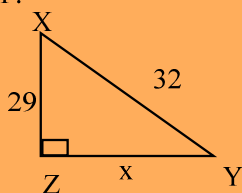
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Ex2b) Find g , $\angle E$ and $\angle F$:
 *round to the tenths.



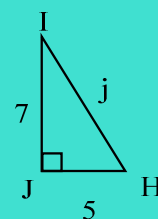
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Ex3c) Find x , $\angle X$ and $\angle Y$:
 *round to the tenths.



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Try#2. Find j , $\angle I$, and $\angle H$.



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