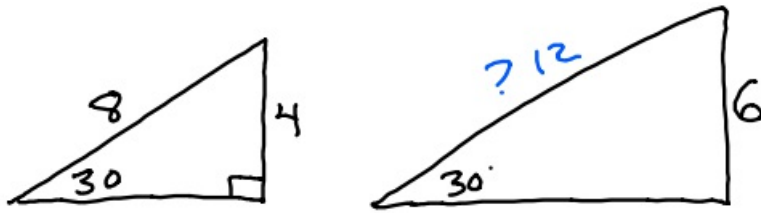
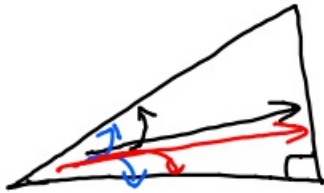


2-13-20 4<sup>th</sup> Trig



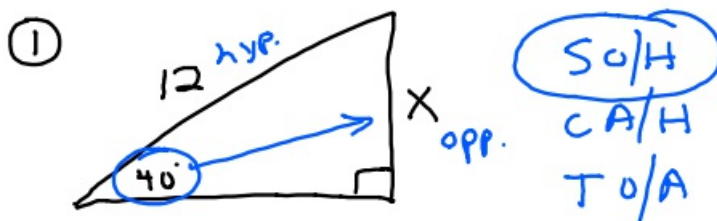
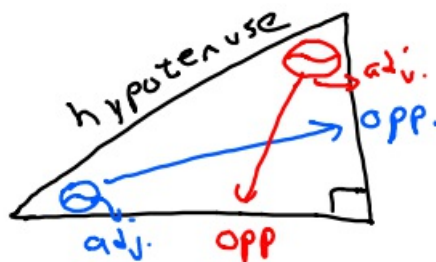
Relationship was 1:2  
 $\frac{1}{2} (.5)$



SOH CAH TOA

SOH                      CAH                      TOA

$$\sin \theta = \frac{\text{opp}}{\text{hyp}} \quad \cos \theta = \frac{\text{adj.}}{\text{hyp}} \quad \tan \theta = \frac{\text{opp.}}{\text{adj.}}$$

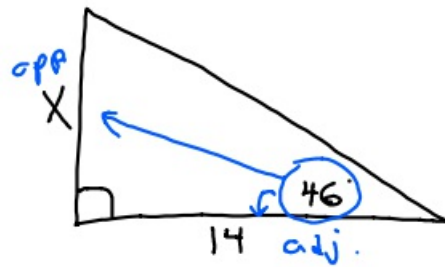


$$\frac{\sin 40^\circ}{1} = \frac{X}{12}$$

$$X = 12 \cdot \sin 40^\circ$$

$$X \approx 7.7$$

②



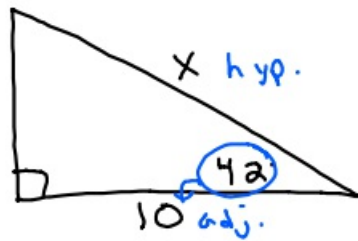
SOH  
CAH  
TOA

$$\frac{\tan 46^\circ}{1} = \frac{X}{14}$$

$$X = 14 \cdot \tan 46^\circ$$

$$X \approx 14.5$$

③



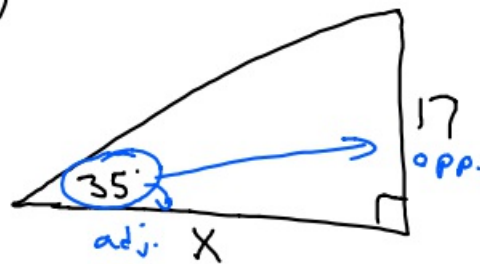
SOH  
CAH  
TOA

$$\frac{\cos 42^\circ}{1} = \frac{10}{X}$$

$$X \cdot \frac{\cos 42^\circ}{\cos 42^\circ} = \frac{10}{\cos 42^\circ}$$

$$X \approx 13.5$$

④



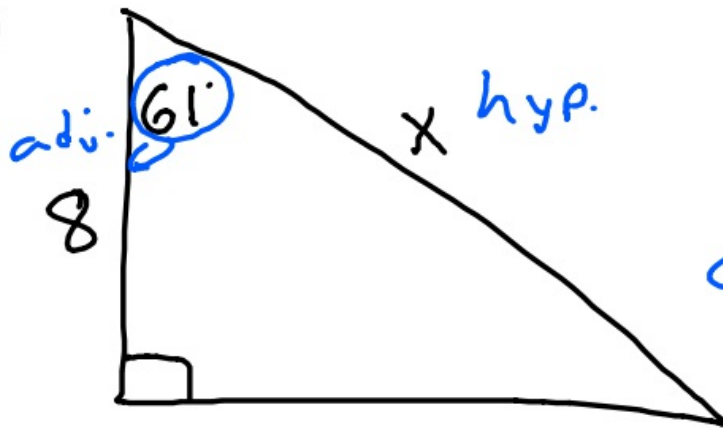
SOH  
CAH  
TOA

$$\frac{\tan 35^\circ}{1} = \frac{17}{X}$$

$$X \cdot \frac{\tan 35^\circ}{\tan 35^\circ} = \frac{17}{\tan 35^\circ}$$

$$X \approx 24.3$$

⑤



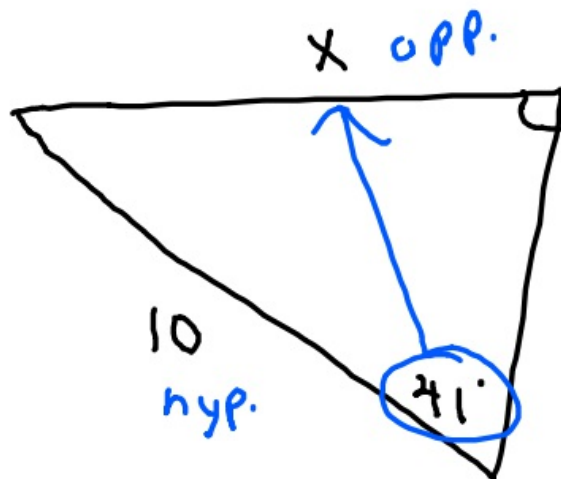
SOH  
CAH  
TOA

$$\frac{\cos 61^\circ}{1} = \frac{8}{x}$$

$$\frac{x \cdot \cos 61^\circ}{\cos 61^\circ} = \frac{8}{\cos 61^\circ}$$

$$x \approx 16.5$$

⑥

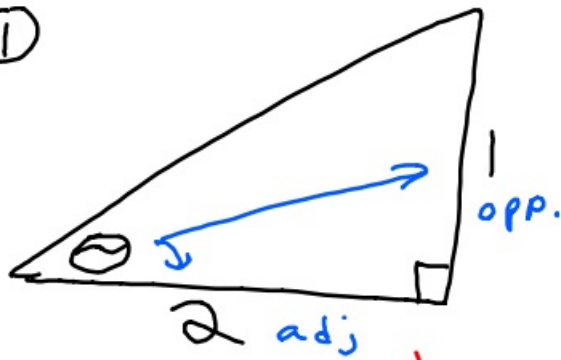


$$\frac{\sin 41^\circ}{1} = \frac{x}{10}$$

$$x = 10 \cdot \sin 41^\circ$$

$$x \approx 6.6$$

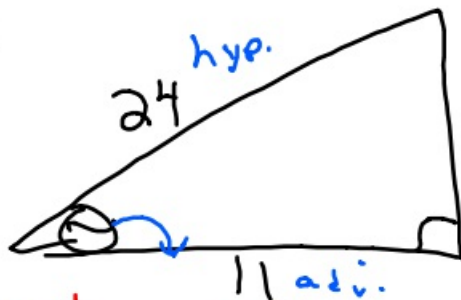
①



$$\cancel{\cos^{-1}} \cancel{\cos} \theta = \tan^{-1} \frac{1}{2}$$

$$\theta \approx 26.6^\circ$$

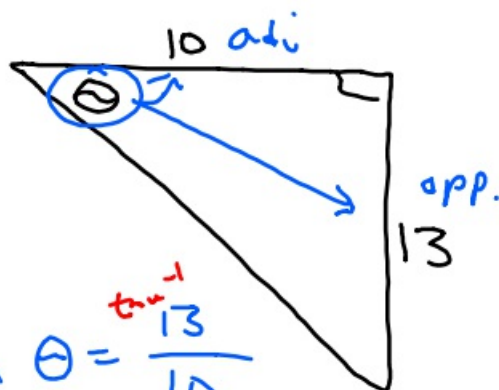
②



$$\cancel{\cos^{-1}} \cancel{\cos} \theta = \cos^{-1} \frac{11}{24}$$

$$\theta \approx 62.7^\circ$$

③



$$\cancel{\tan^{-1}} \cancel{\tan} \theta = \tan^{-1} \frac{13}{10}$$

$$\theta \approx 52.4^\circ$$