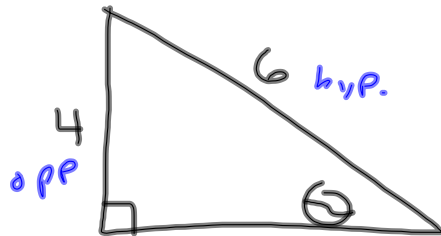


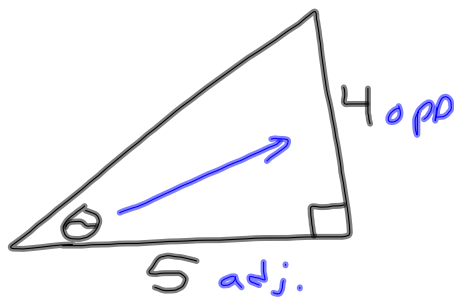
2-19-14  
3<sup>rd</sup> Trig



$$\sin \theta = \frac{4}{6} = .6666$$

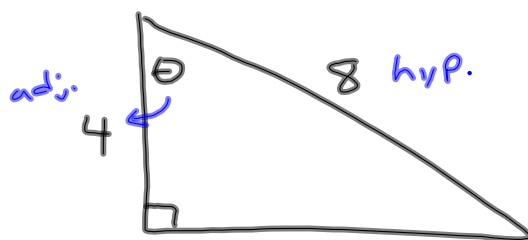
$$\cancel{\sin^{-1}} \sin \theta = \sin^{-1} \frac{4}{6}$$

$$\theta \approx 41.8^\circ$$



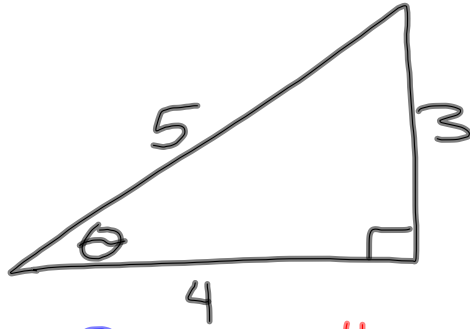
$$\cancel{\tan^{-1}} \tan \theta = \tan^{-1} \frac{4}{5}$$

$$\theta \approx 38.7^\circ$$



$$\cancel{\cos^{-1}} \cos \theta = \cos^{-1} \frac{4}{8}$$

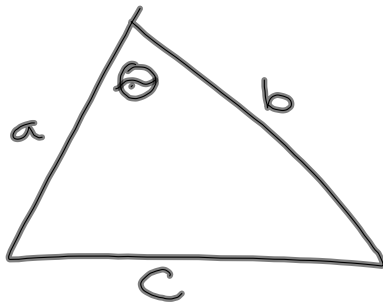
$$\theta = 60^\circ$$



$$\tan \theta = \frac{3}{4} \quad \cos \theta = \frac{4}{5} \quad \sin \theta = \frac{3}{5}$$

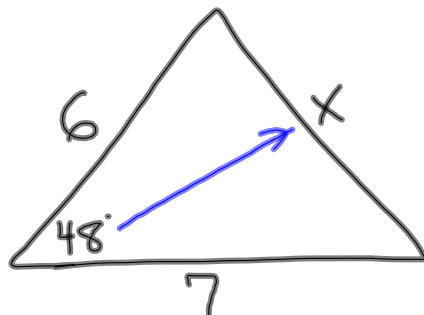
$$\theta \approx 36.9^\circ$$

New Section



Law of Cosines

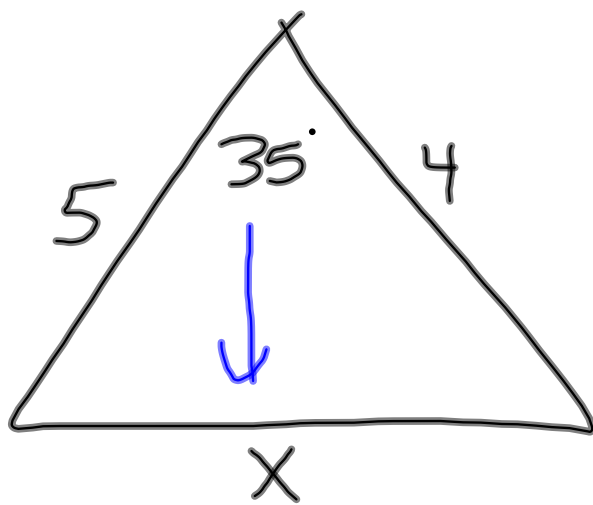
$$c^2 = a^2 + b^2 - 2ab \cdot \cos \theta$$



$$x^2 = 7^2 + 6^2 - 2 \cdot 7 \cdot 6 \cdot \cos 48^\circ$$

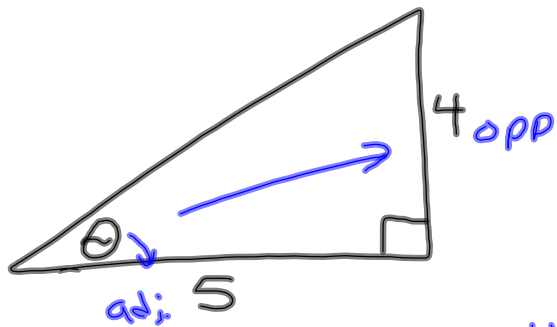
$$\sqrt{x^2} \approx \sqrt{28.79} \dots$$

$$x \approx 5.37$$

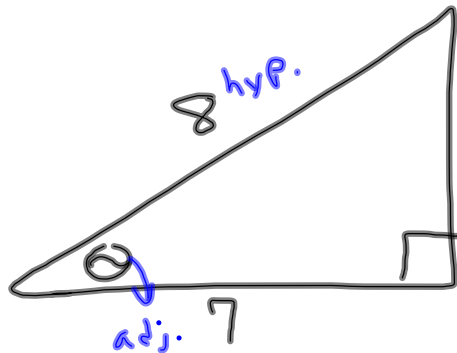


$$x^2 = 5^2 + 4^2 - 2 \cdot 5 \cdot 4 \cdot \cos 35^\circ$$
$$\sqrt{x^2} \approx \sqrt{8.23 \dots \dots}$$
$$x \approx 2.87$$

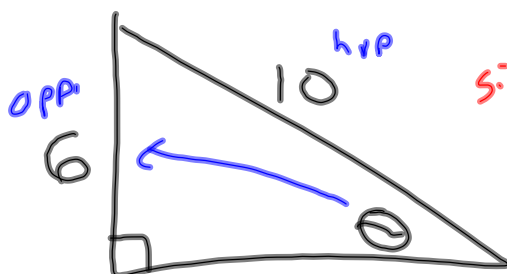
2-19-14  
4<sup>th</sup> Trig



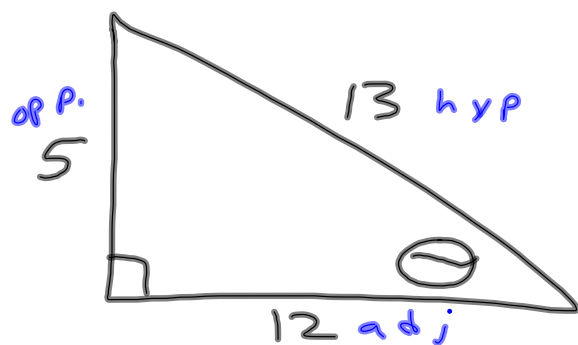
$$\cancel{\cos^{-1} \cos} \theta = \tan^{-1} \frac{4}{5}$$
$$\theta \approx 38.66^\circ$$



$$\cancel{\cos^{-1} \cos} \theta = \cos^{-1} \frac{7}{8}$$
$$\theta \approx 28.96^\circ$$



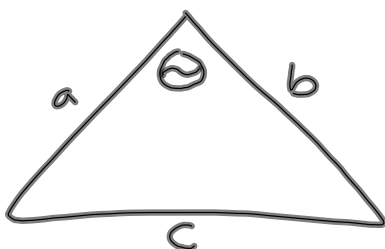
$$\cancel{\sin^{-1} \sin} \theta = \sin^{-1} \frac{6}{10}$$
$$\theta \approx 36.87^\circ$$



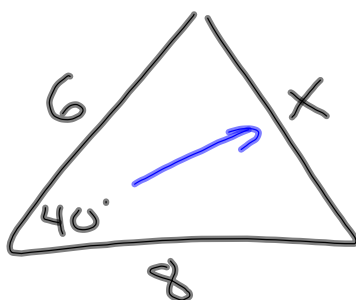
$$\cos \theta = \frac{12}{13} \quad \sin \theta = \frac{5}{13} \quad \tan \theta = \frac{5}{12}$$

$$\theta \approx 22.62^\circ$$

New Section



Law of cosines:  $c^2 = a^2 + b^2 - 2ab \cdot \cos \theta$



$$x^2 = 8^2 + 6^2 - 2 \cdot 8 \cdot 6 \cdot \cos 40^\circ$$

$$\sqrt{x^2} \approx \sqrt{26.45973346\dots}$$

$$x \approx 5.14$$