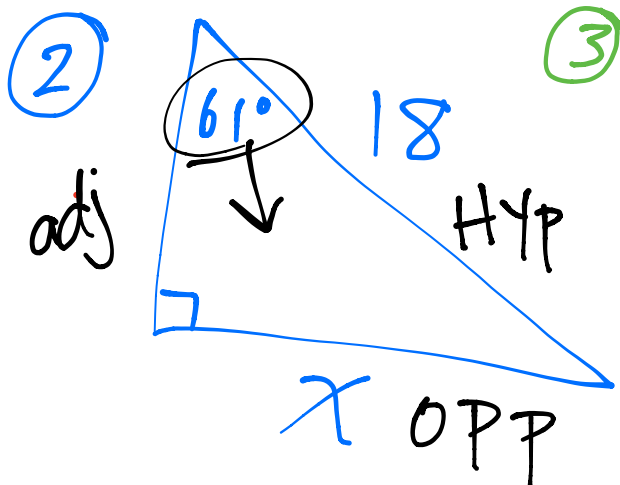


Using your notes & homework, answer each question. You will be submitting this for a grade. Do not work together.

① Multiply:  $(3x-5y)^2$

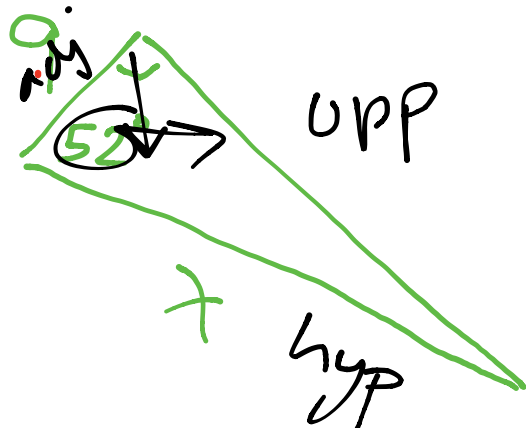
Solve for x:



$$\sin 61^\circ = \frac{x}{18}$$

$$x = 18 \cdot \sin 61^\circ$$

$$x = 15.743$$



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

$$\cos 52^\circ = \frac{9}{x}$$

$$\frac{x \cos 52^\circ}{\cos 52^\circ} = \frac{9}{\cos 52^\circ}$$

$$\lambda = \frac{9}{\cos 52^\circ} =$$
$$\lambda = 14.618$$

$$(3x - 5y)^2$$

$$(3x - 5y)(3x - 5y)$$

$$9x^2 - 15xy - 15xy + 25y^2$$

$$9x^2 - 30xy + 25y^2$$

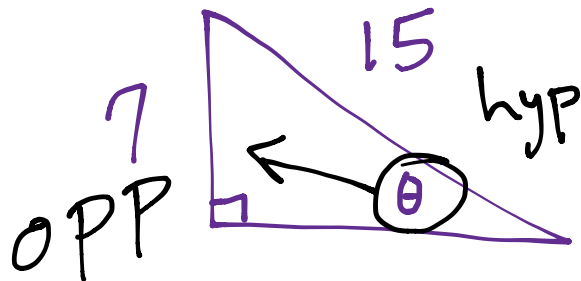
Use SohCahToa to find angles

$$\sin \theta = \frac{\text{OPP}}{\text{hyp}}$$

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

$$\tan \theta = \frac{\text{OPP}}{\text{adj}}$$

Ex. Find  $\theta$



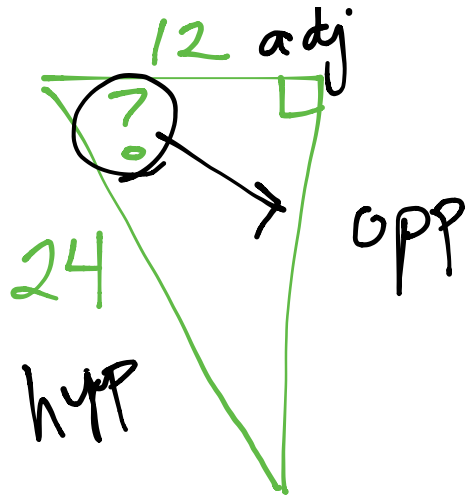
$$\sin \theta = \frac{7}{15}$$

$$\theta = \sin^{-1}(7 \div 15)$$

↪ inverse sin

$$\theta = 27.818^\circ$$

Solve:

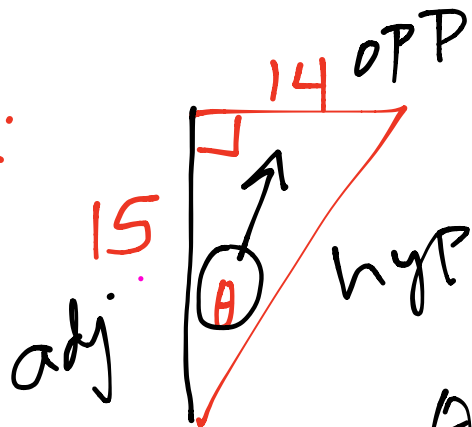


$$\cos ? = \frac{12}{24}$$

$$? = \cos^{-1}(12 \div 24)$$

$$? = 60^\circ$$

Solve:



$$\tan \theta = \frac{14}{15}$$

$$\theta = \tan^{-1}(14 \div 15)$$

$$\theta = 43.025^\circ$$