

How do I apply Trig
Identities? 4/13

$$\cos^2 \theta + \sin^2 \theta = 1$$

If $\sin \theta = \frac{24}{25}$ find $\cos \theta$
opp
hyp

$$\cos^2 \theta + \left(\frac{24}{25}\right)^2 = 1$$

$$\cos^2 \theta + \frac{576}{625} = 1$$

$$- \frac{576}{625} \quad - \frac{576}{625}$$

$$\sqrt{\cos^2 \theta} = \frac{\sqrt{49}}{\sqrt{625}}$$

$$\cos \theta = \frac{7}{25} \quad \begin{array}{l} \text{adj} \\ \text{hyp} \end{array}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}} = \frac{24}{7}$$

