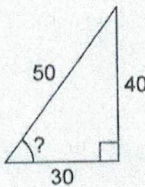
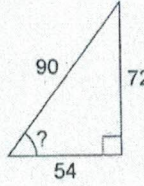
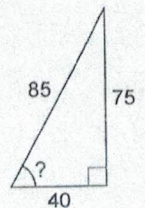


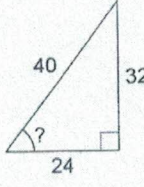
Using Trig to Find Angle Measures

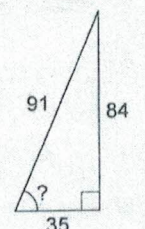
Find the measure of the indicated angle to the nearest tenth of a degree.

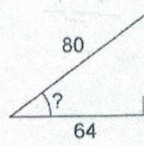
1)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{40}{50}\right) \\ \cos^{-1}\left(\frac{30}{50}\right) \\ \tan^{-1}\left(\frac{40}{30}\right) \end{array} \right) = \underline{\underline{53.1^\circ}}$

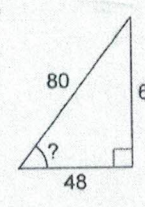
2)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{72}{90}\right) \\ \cos^{-1}\left(\frac{54}{90}\right) \\ \tan^{-1}\left(\frac{72}{54}\right) \end{array} \right) = \underline{\underline{53.1^\circ}}$

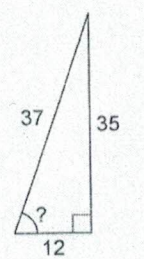
3)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{75}{85}\right) \\ \cos^{-1}\left(\frac{40}{85}\right) \\ \tan^{-1}\left(\frac{75}{40}\right) \end{array} \right) = \underline{\underline{61.9^\circ}}$

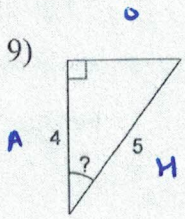
4)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{32}{40}\right) \\ \cos^{-1}\left(\frac{24}{40}\right) \\ \tan^{-1}\left(\frac{32}{24}\right) \end{array} \right) = \underline{\underline{53.1^\circ}}$

5)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{84}{91}\right) \\ \cos^{-1}\left(\frac{35}{91}\right) \\ \tan^{-1}\left(\frac{84}{35}\right) \end{array} \right) = \underline{\underline{67.4^\circ}}$

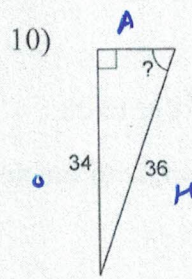
6)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{48}{80}\right) \\ \cos^{-1}\left(\frac{64}{80}\right) \\ \tan^{-1}\left(\frac{48}{64}\right) \end{array} \right) = \underline{\underline{36.9^\circ}}$

7)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{64}{80}\right) \\ \cos^{-1}\left(\frac{48}{80}\right) \\ \tan^{-1}\left(\frac{64}{48}\right) \end{array} \right) = \underline{\underline{53.1^\circ}}$

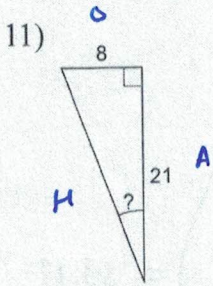
8)  $\left. \begin{array}{l} \sin^{-1}\left(\frac{35}{37}\right) \\ \cos^{-1}\left(\frac{12}{37}\right) \\ \tan^{-1}\left(\frac{35}{12}\right) \end{array} \right) = \underline{\underline{71.1^\circ}}$



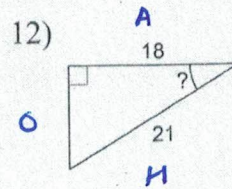
$$\cos^{-1}\left(\frac{4}{5}\right) = \underline{\underline{36.9^\circ}}$$



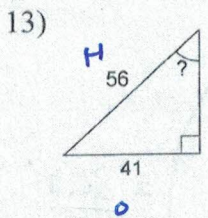
$$\sin^{-1}\left(\frac{34}{36}\right) = \underline{\underline{70.8^\circ}}$$



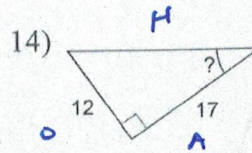
$$\tan^{-1}\left(\frac{8}{21}\right) = \underline{\underline{20.9^\circ}}$$



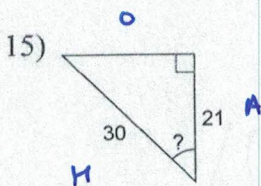
$$\cos^{-1}\left(\frac{18}{21}\right) = \underline{\underline{31.0^\circ}}$$



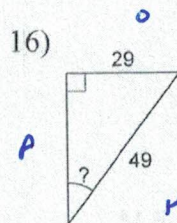
$$\sin^{-1}\left(\frac{41}{56}\right) = \underline{\underline{47.1^\circ}}$$



$$\tan^{-1}\left(\frac{12}{17}\right) = \underline{\underline{35.2^\circ}}$$



$$\cos^{-1}\left(\frac{21}{30}\right) = \underline{\underline{45.6^\circ}}$$



$$\sin^{-1}\left(\frac{29}{49}\right) = \underline{\underline{36.3^\circ}}$$