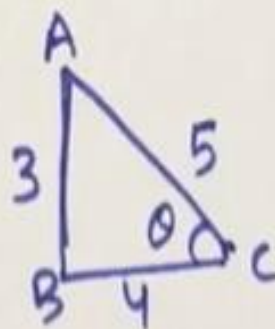


Trigonometry

Sin $\longrightarrow$ cosec

cos $\longrightarrow$ sec

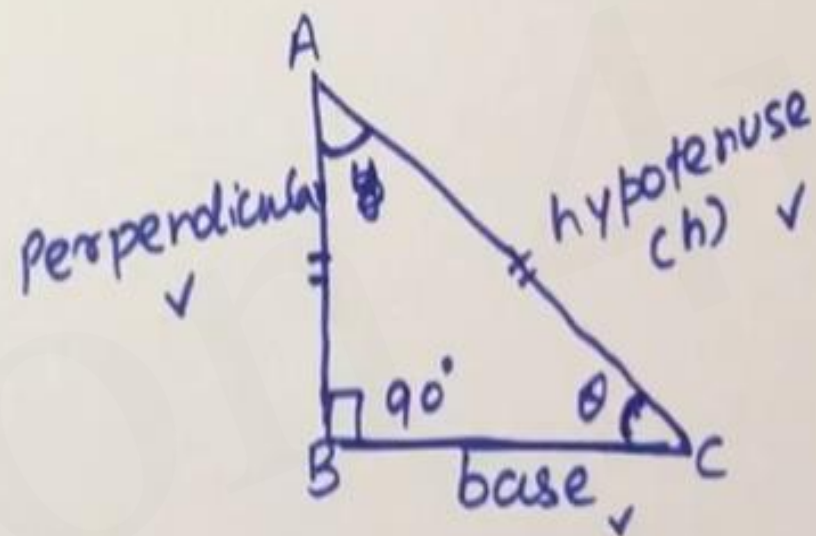
Tan $\longrightarrow$ cot



$$\left[\begin{array}{l} \checkmark \sin \theta = \frac{p}{h} = \frac{3}{5} \checkmark \Rightarrow \frac{1}{\csc \theta} \checkmark \\ \checkmark \cos \theta = \frac{b}{h} = \frac{4}{5} \Rightarrow \frac{1}{\sec \theta} \\ \checkmark \tan \theta = \frac{p}{b} = \frac{3}{4} \checkmark \Rightarrow \frac{1}{\tan \theta} \\ \quad = \frac{\sin \theta}{\cos \theta} = \frac{\frac{3}{5}}{\frac{4}{5}} = \frac{3}{5} \times \frac{5}{4} = \frac{3}{4} \end{array} \right]$$

$$\left[\sin \theta = \frac{3}{5}, \csc \theta = \frac{5}{3} \right] \checkmark$$

Trigonometric Ratios



$$\left[\begin{array}{l} \sin \theta = \frac{1}{\csc \theta} \Rightarrow \sin \theta \cdot \csc \theta = 1 \\ \cos \theta = \frac{1}{\sec \theta} \Rightarrow \cos \theta \cdot \sec \theta = 1 \\ \tan \theta = \frac{1}{\cot \theta} \Rightarrow \tan \theta \cdot \cot \theta = 1 \\ \quad = \frac{\sin \theta}{\cos \theta} \end{array} \right]$$