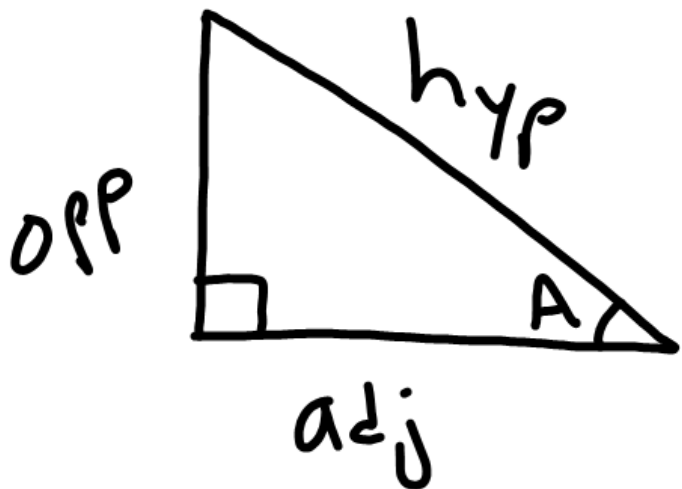


7.6 Sine & Cosine Ratios

* Now we use the hyp.



$$\sin A = \frac{\text{opp}}{\text{hyp}} \quad \frac{\text{Oscar}}{\text{Had}}$$

$$\cos A = \frac{\text{adj}}{\text{hyp}} \quad \frac{\text{A}}{\text{Heap}}$$

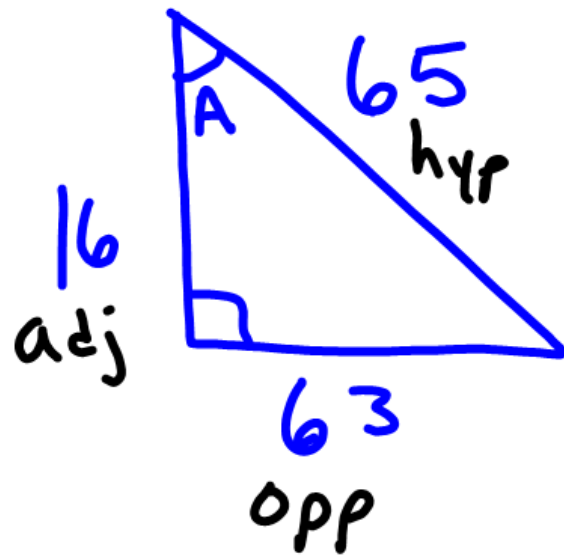
$$\tan A = \frac{\text{opp}}{\text{adj}} \quad \frac{\text{Of}}{\text{Apples}}$$

or think **SOH-CAH-TOA**

Sine
 cosine
 tangent

Example

Find $\sin A$, $\cos A$ & $\tan A$. Write as fraction
& as a decimal.



Fraction

$$\sin A = \frac{63}{65} \begin{matrix} O \\ H \end{matrix}$$

$$\cos A = \frac{16}{65} \begin{matrix} A \\ H \end{matrix}$$

$$\tan A = \frac{63}{16} \begin{matrix} O \\ A \end{matrix}$$

Decimal

$$\sin A = 0.9692$$

$$\cos A = 0.2461$$

$$\tan A = 3.937$$