

TRIGONOMETRY:

relationships between the angles + the lengths of the sides of triangles.

Angles in Trigonometry are usually indicated in Greek letters:

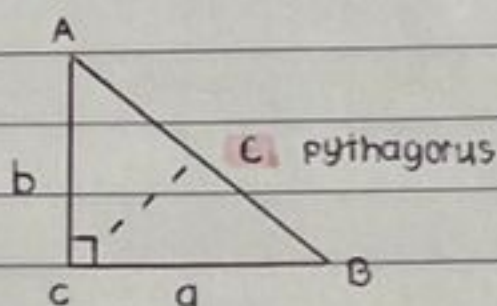
$\theta = \text{theta}$ $\beta = \text{beta}$ $\alpha = \text{alpha}$ $\phi = \text{phi}$

~ PYTHAGORUS THEOREM:

$$c^2 = a^2 + b^2$$

$$a^2 = c^2 - b^2$$

$$b^2 = c^2 - a^2$$



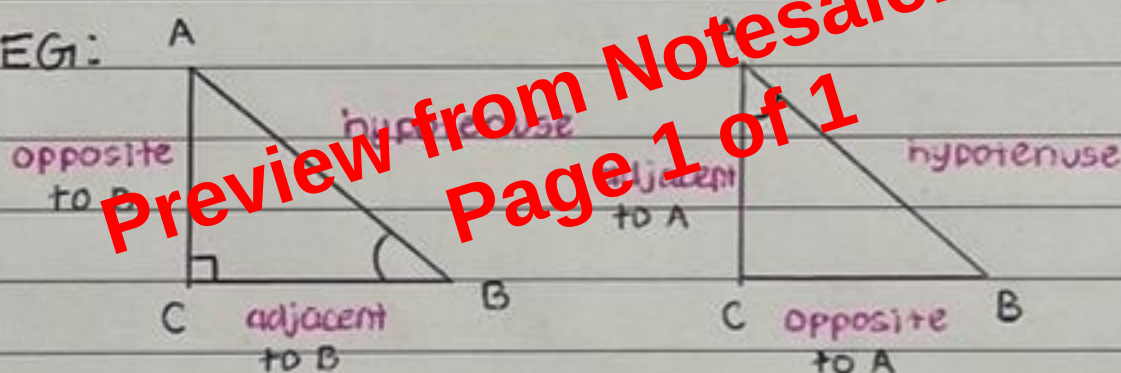
Label 3 sides of the Δ as... adjacent, opposite, and hypotenuse

adjacent = the side left over from opposite + adjacent sides, side next to $\angle$

opposite = opposite the main angle

hypotenuse = longest side, in between the adjacent + opposite sides

Eg:



~ TRIGONOMETRY RATIOS:

Sin } Applied to a right angled Δ :
Cos } define the relationship between
Tan } its sides + angles

$$\text{Sin} = \frac{\text{opp}}{\text{hyp}}$$

$$\text{Cos} = \frac{\text{adj}}{\text{hyp}}$$

$$\text{Tan} = \frac{\text{opp}}{\text{adj}}$$