



G4: TRIGONOMETRY

DATE: 12/10/15

ESSENTIAL QUESTION:

How do I find the angles in a right triangle using known side lengths?

QUESTIONS:

Why is it called ARC?

NOTES:

INVERSE TRIG FUNCTION: WHEN THE RATIO BETWEEN THE LENGTHS OF TWO SIDES IN A RIGHT TRIANGLE IS KNOWN, WE CAN USE \sin^{-1} (INVERSE SINE), \cos^{-1} (INVERSE COSINE) AND \tan^{-1} (INVERSE TANGENT) TO FIND THE MEASURE OF ONE OF THE ACUTE ANGLES IN THE RIGHT TRIANGLE.

~~A~~ YOU MAY ALSO SEE THESE WRITTEN AS:

$$\text{ARCSIN}(x) = \sin^{-1}(x)$$

$$\text{ARCCOS}(x) = \cos^{-1}(x)$$

$$\text{ARCTAN}(x) = \tan^{-1}(x)$$



$$\theta = \sin^{-1}\left(\frac{\text{OPP}}{\text{HYP}}\right) \text{ SOH}$$

$$\theta = \cos^{-1}\left(\frac{\text{ADJ}}{\text{HYP}}\right) \text{ CAH}$$

$$\theta = \tan^{-1}\left(\frac{\text{OPP}}{\text{ADJ}}\right) \text{ TOA}$$