TrigFunctions using SOHCAHTOA

SOH. CAH. TOA

Sine= opp/hyp. Cos= adj/hypo. Tangent= opp/adj

SINE OF ANGLE = SINØ= OPP/HYP

IN order to find the sine of angle, you must know the **lengths of the opposite side & the hypotenus. If asked to find an**gle with little information for instance, find the sin of angle F in the figure below.

Image

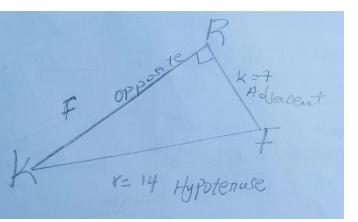
<u>Note</u>:

- the capital letters are the angles, wherever they are facing are the sides denoted in small letters.
- * When the night angle (ong) (90%) is facing is the hypotenuse
- ★ Where ever the angle you are dealing with is facing is the opposite, while the remaining inside is adjacent.

Now looking for the sing

Using <u>SOH</u> CAH TOA

Since hyp= 14, and we are looking for sinf



SINF = OPP/ hyp, but opp= ? Applying Pythagora's theorem to find 'f'= opp $r^2=f^2+k^2$ (Pythagoras theorem) $14^2=f^2+7^2$ $f^2=196-49$ $f^{2=}147$, f = $\sqrt{147}$, f = $7\sqrt{49}\times3=7\sqrt{3}$ Since f= $7\sqrt{3}$, now sinf= $7\sqrt{3}/14$ Sinf f= $\sqrt{3}/2$