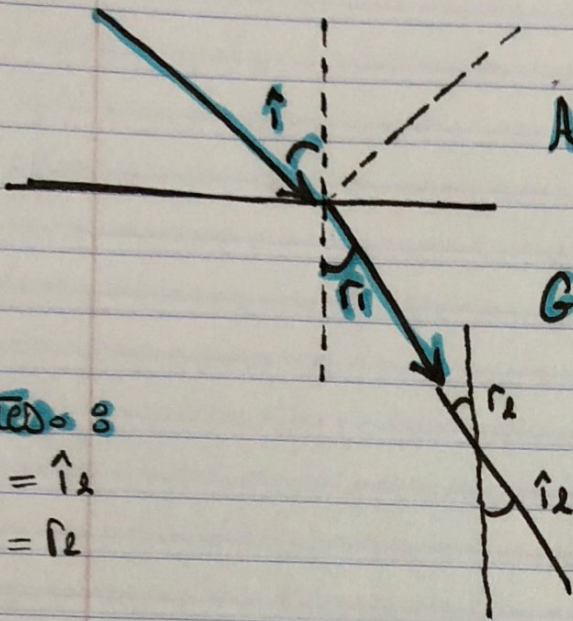


Exp 6: Index of Refraction.

سبب انحراف الضوء:

سرعة اختراق الضوء لاجل وسط

حيث ان لاجل مادة معامل انحراف يعتمد على سرعة الضوء فيها



Notes:

$$i_1 = i_2$$

$$r_1 = r_2$$

$$\mu = \frac{\text{Speed of Light in vacuum.}}{\text{speed of Light in Medium.}}$$

$$\mu = \frac{c}{v}$$

$$\mu \geq 1$$

NOTE: The Light Bends when it's Move's From Medium To Another.

Snell's law:

index of refraction in Air

$$\mu_a \sin(i) = \mu_g \sin(r)$$

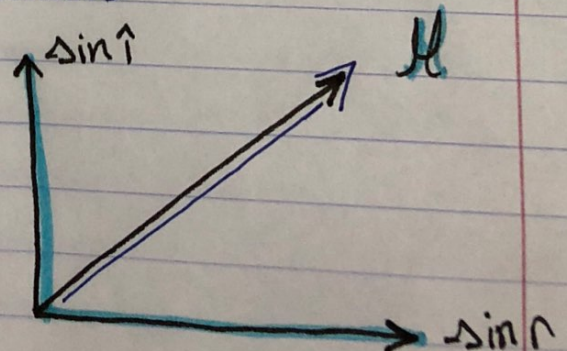
Angel of incidence

index of refraction in Glass

Angel of refraction.

$$\mu_{air} \approx 1$$

$$\text{So, } \mu_g = \frac{\sin(i)}{\sin(r)}$$



UNC₀ ?

$$\frac{\Delta H_g}{H_g} = \frac{\cos \hat{t}}{\sin \hat{t}} \Delta \hat{t} + \frac{\cos r}{\sin r} \Delta r$$

$\Delta \hat{t}, \Delta r$

By estimation.