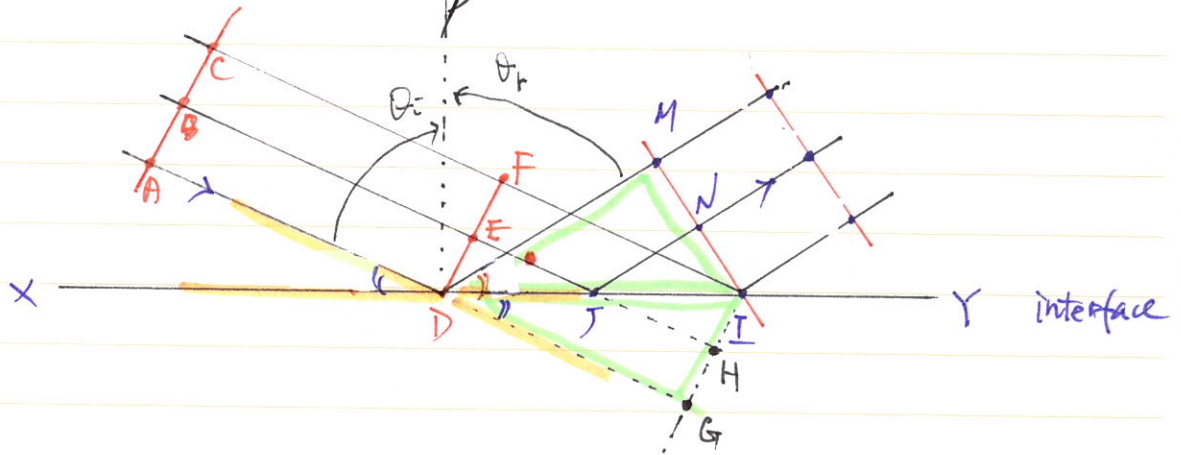


< Laws of Reflection >

$$\langle \Delta L = v \Delta t \rangle$$



1. The wavefront \overline{AC} is incident upon the interface \overline{XY} at an angle of θ_i .
2. The wavefronts do not arrive the interface simultaneously.
3. If there is no interface \overline{XY} , then another wavefront \overline{GI} would be formed!
4. Due to the interface, the actual wavefront \overline{MI} .

$$\rightarrow \overline{DG} = \overline{DM}; = \overline{EJ} + \overline{JN}; = \overline{FI} \quad \text{; same time interval}$$

$$\sqrt{5. \quad \angle ADX = \angle IDG} \quad \text{(alternate)} \quad \text{; alternative angle (अवर्त)}$$

$$6. \quad \text{For } \triangle DMI \text{ \& } \triangle DIG,$$

$$\overline{DI}, \quad \overline{DM} = \overline{DG}, \quad \angle DMI = \angle DGI = 90^\circ$$

$$\rightarrow \overline{MI} = \overline{IG}$$

$$\therefore \angle IDG = \angle MDI$$

$$\therefore \theta_i = \theta_r$$