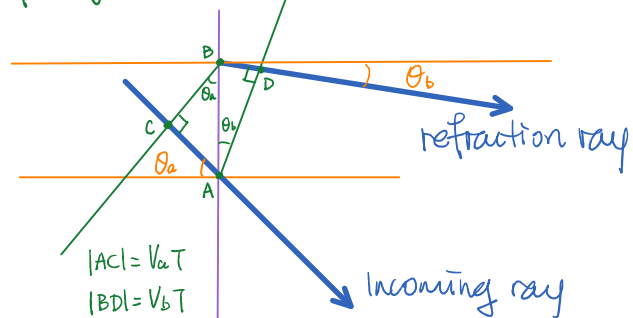


T - period of the wave
 V_a - speed of the wave in material a
 V_b - speed of the wave in material b



$$\sin \theta_a = \frac{|AC|}{|AB|} = \frac{V_a T}{|AB|}$$

$$\sin \theta_b = \frac{|BD|}{|AB|} = \frac{V_b T}{|AB|}$$

$$\Rightarrow \frac{\sin \theta_a}{\sin \theta_b} = \frac{V_a T}{V_b T} = \frac{V_b}{V_a}$$

