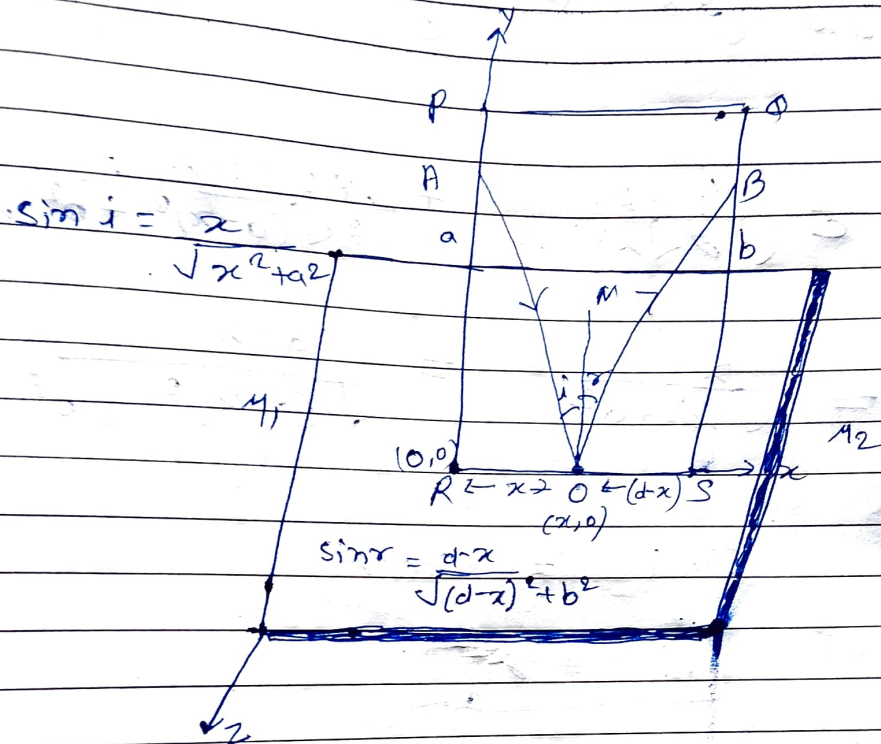


Laws of principle of

Reflection from Fermat's



Second law of Reflection

If  $c$  is the velocity of light then Time taken to travel the optical path

$$t = \frac{\Delta}{c}$$

$$t = \frac{n(L)}{c} \quad (n=1)$$

$$t = \frac{L}{c} = \frac{(AO + OB)}{c}$$

$$= \frac{\sqrt{x^2 + a^2} + \sqrt{(d-x)^2 + b^2}}{c}$$

$$\Rightarrow \frac{x}{\sqrt{x^2 + a^2}} = \frac{(d-x)}{\sqrt{(d-x)^2 + b^2}}$$

$$\sin i = \sin r$$

$$i = r$$

$$L_i = L_r$$