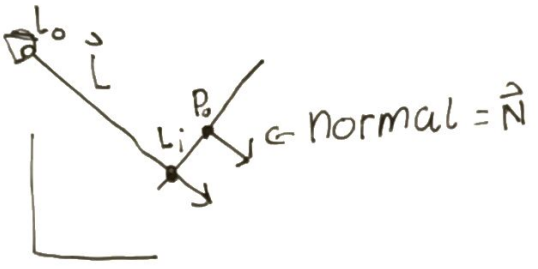
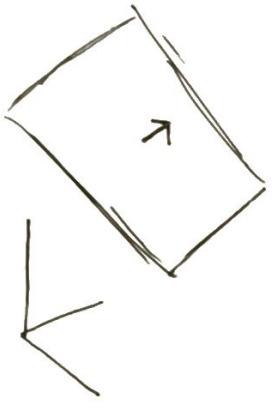
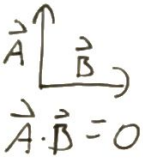





$\vec{A} \cdot \vec{B} = 0$

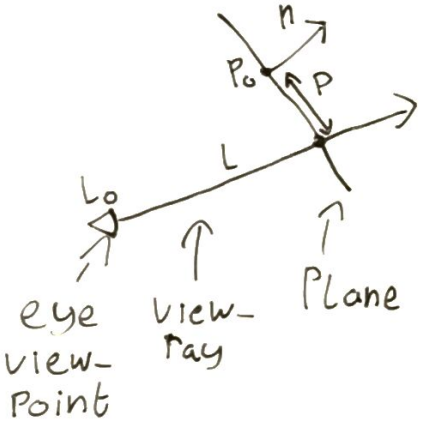
$\vec{L} = L_o + Lt$

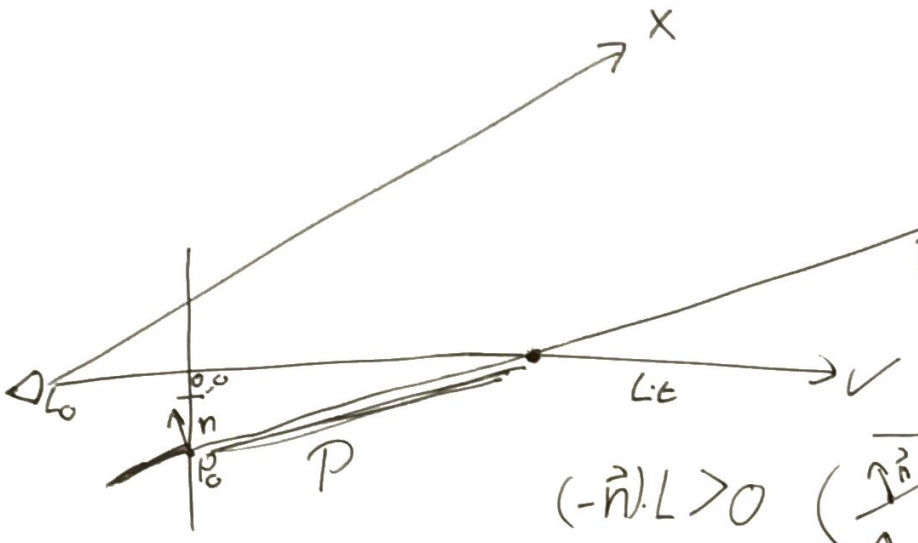
$(P_o - P_{point}) \cdot \vec{N} = 0$

$(P_o - L_o + \vec{L}t) \cdot \vec{N} = 0$

$\vec{N} \cdot L t + (P_o - L_o) \cdot \vec{N} = 0$

$t = -\frac{(P_o - L_o) \cdot \vec{N}}{\vec{N} \cdot L}$




(cold hands)

$(-\vec{n}).L > 0$ ( $\vec{n}$ $L$ )

↳ $= \vec{N}.\vec{l} < 0$

↳ $= (-\vec{N}).\vec{l} > 0$