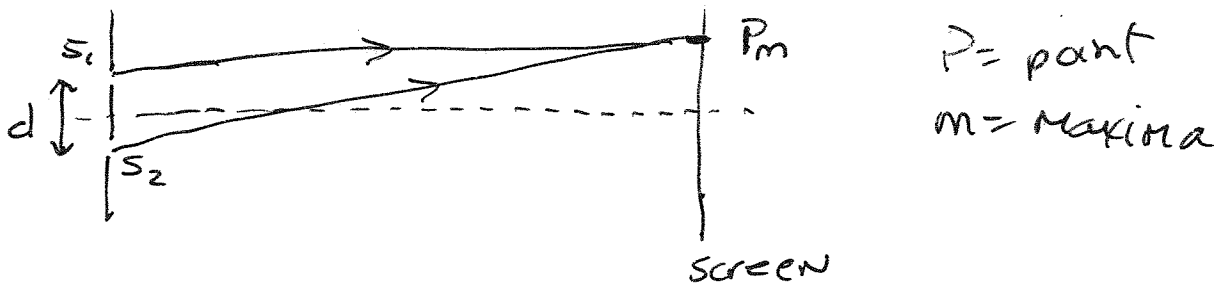


3 Interference formulas

① Not so commonly used - very intuitive.



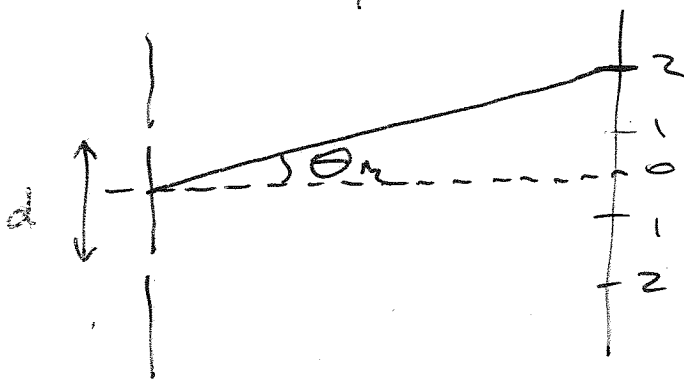
d = distance
betw. 2 slits (m)

$$\boxed{|P_m S_1 - P_m S_2| = m \lambda}$$

path difference
p.d.

"m" whole number.

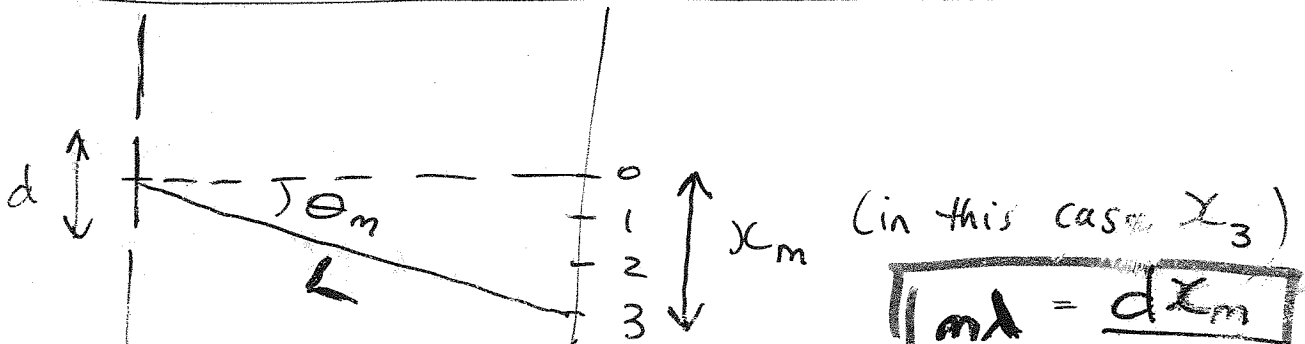
② Most commonly used formula - b/c variables easy to measure in exp't.



$$\boxed{m \lambda = d \sin \theta_m}$$

∴ in this case
 $2 \lambda = d \sin \theta_2$

③



L = length / distance
between 2 slits + screen.

$$\boxed{m \lambda = \frac{d x_m}{L}}$$