or,

$$X_0 = \frac{2\lambda D}{a}$$

4. **Linear position of n^{th} minima** – Distance of n^{th} minima from the center of the screen is given by $y_n = \theta_n.D$

(As, usually the lens L_2 is kept close to the slit, in numerical problems we can take $D \approx f$)

$$y_n = \pm \frac{n\lambda D}{a}$$

5. **Linear position of n^{th} maxima** – distance of n^{th} minima from the center of the screen is given by $y_n' = \theta_n'.D$

(As, usually the lens L_2 is kept close to the slit, in numerical problems we can take $D \approx f$)

$$y_n' = \pm \frac{(2n+1)\lambda D}{a}$$

Where n = 1, 2, 3, ……..