

## Double Slit

double central maximum

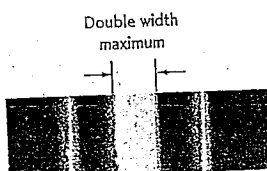
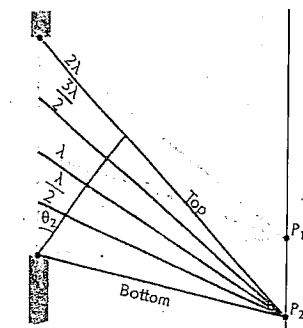
$$\lambda = \frac{w \Delta x}{L}$$

Appearance image



opening is considered multiple sources

pattern fades as n increases



## Single Slit

diffraction effect

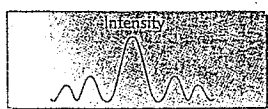
$\Delta x$  is not constant for whole pattern

Appearance image



interference effect

$$\lambda = \frac{d \Delta x}{L}$$

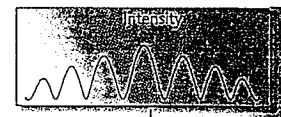


## Diffraction Grating

sharpest pattern

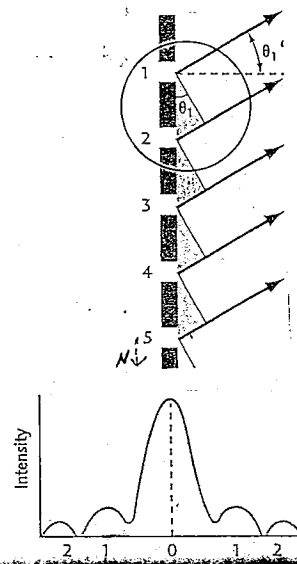
$$d = \frac{w}{N}$$

Appearance image



$$\lambda = \frac{d \Delta x}{L}$$

separates white light into colours



Property or Feature	Single Slit	Double Slit	Diffraction Grating	Similarity or Difference?
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1.

2.

3.

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