

30 Light of wavelength λ is incident normally on a diffraction grating with a total number of N lines in width w .

A second order maximum is observed at an angle of diffraction θ .

What is N ?

A $\frac{w\lambda}{\sin\theta}$

B $\frac{2w\lambda}{\sin\theta}$

C $\frac{w\sin\theta}{2\lambda}$

D $\frac{w\sin\theta}{\lambda}$