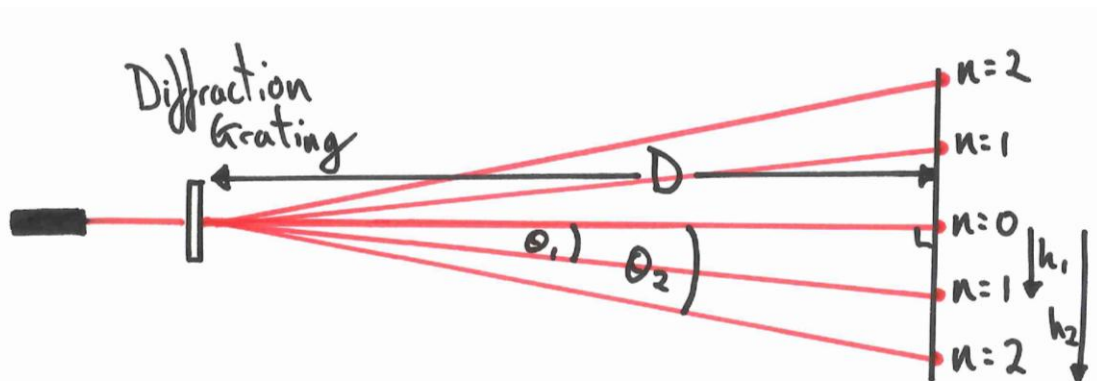


A Level Physics Online

The Wavelength of Light using a Diffraction Grating



$$n \lambda = d \sin \theta$$

$$n_1 \quad \theta_1 = \tan^{-1} \frac{D}{h_1} \quad \lambda = \frac{d \sin \theta_1}{1}$$

$$n_2 \quad \theta_2 = \tan^{-1} \frac{D}{h_2} \quad \lambda = \frac{d \sin \theta_2}{2}$$

n_3 etc



Don't look into the laser!

$\lambda_{\text{red light}} \approx 622 - 780 \text{ nm}$

