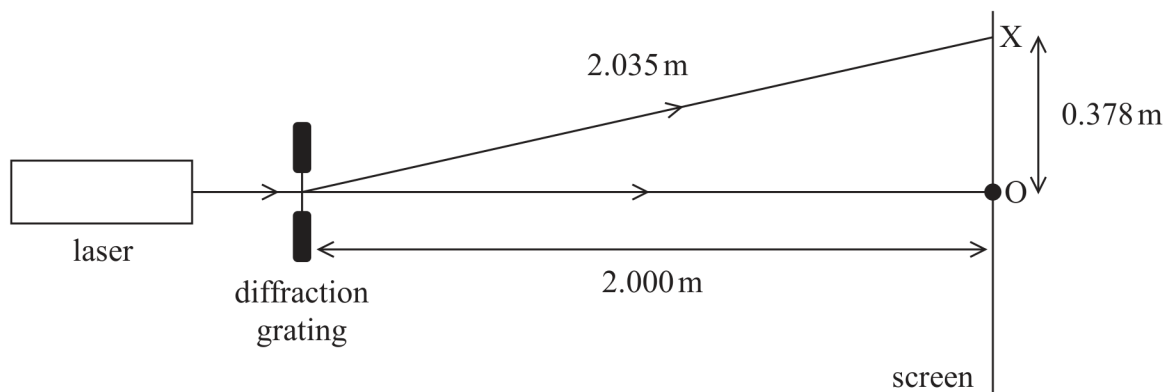


- 5 A laser, diffraction grating and screen are set up as shown. The position of the central maximum is O and the position of the first order maximum is X.

The diffraction grating has 300 lines per mm.



Which of the following expressions gives the wavelength of the laser light?

☐ A $(300\,000) \times \left(\frac{0.378}{2.000} \right)$

☐ B $(300\,000) \times \left(\frac{0.378}{2.035} \right)$

☐ C $\left(\frac{1}{300\,000} \right) \times \left(\frac{0.378}{2.000} \right)$

☐ D $\left(\frac{1}{300\,000} \right) \times \left(\frac{0.378}{2.035} \right)$