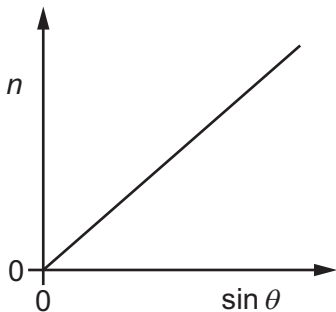


29 A student uses a diffraction grating to determine the wavelength of visible light from a source.

The diffraction grating has 300 lines per mm. The student measures the angle θ of each order n of the intensity maxima. A graph of n against $\sin \theta$ is plotted. The line of best fit for the plotted points is shown and has gradient G .



Which expression represents the wavelength, in m, of the visible light in terms of G ?

A $3 \times 10^5 G$

B $3.3 \times 10^{-6} G$

C $\frac{3.3 \times 10^{-6}}{G}$

D $\frac{300}{G}$