30 A diffraction grating is used to measure the wavelength of monochromatic light, as shown in the diagram.
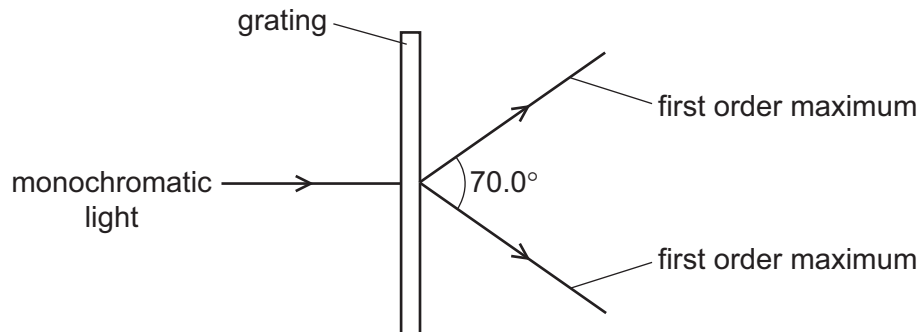

The spacing of the slits in the grating is 1.00×10^{-6} m. The angle between the first order diffraction maxima is $70.0°$.

What is the wavelength of the light?

A 287 nm   **B** 470 nm   **C** 574 nm   **D** 940 nm

Space for working