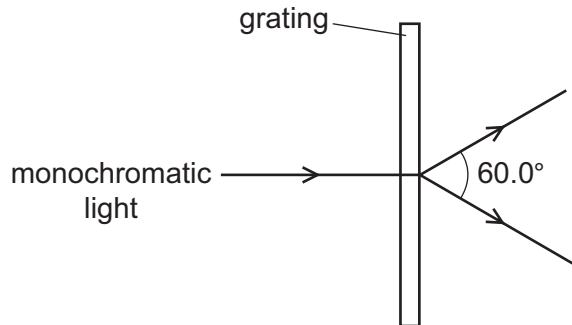


**29** A diffraction grating is used to measure the wavelength of monochromatic light.

The spacing of the slits in the grating is  $1.15 \times 10^{-6} \text{ m}$ . The angle between the first order diffraction maxima is  $60.0^\circ$ , as shown in the diagram.



What is the wavelength of the light?

**A** 288 nm

**B** 498 nm

**C** 575 nm

**D** 996 nm