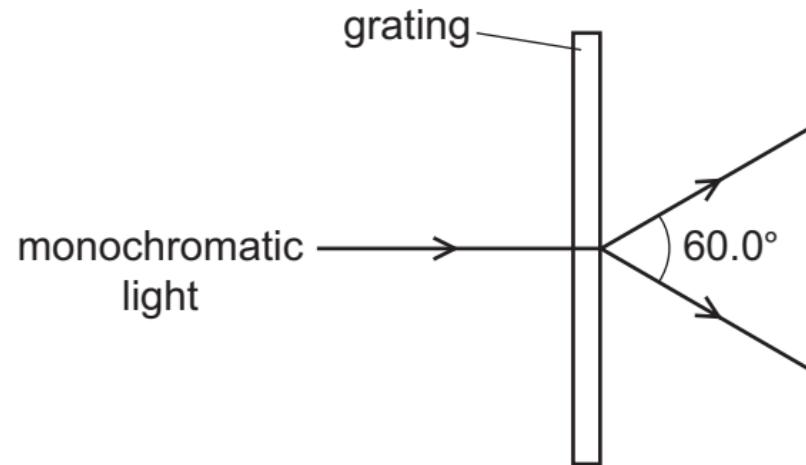


**29** A diffraction grating is used to measure the wavelength of monochromatic light.

The spacing of the slits in the grating is  $1.15 \times 10^{-6}$  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**  $288\text{ nm}$

**B**  $498\text{ nm}$

**C**  $575\text{ nm}$

**D**  $996\text{ nm}$