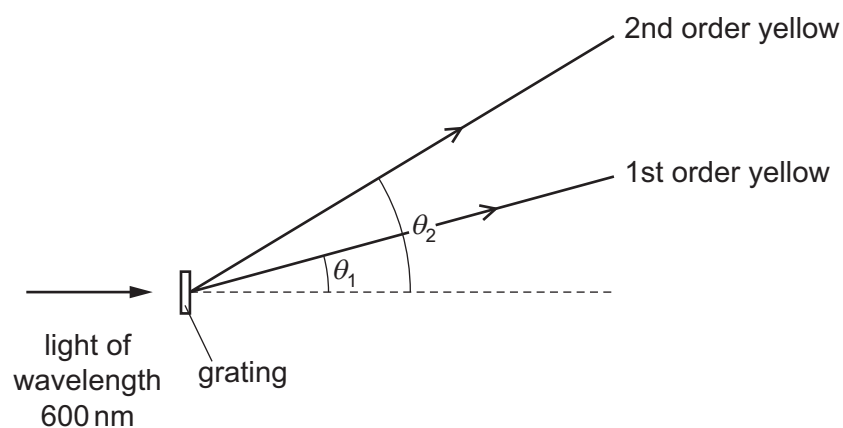


- 27** A diffraction grating experiment is set up using yellow light of wavelength 600 nm. The grating has a slit separation of  $2.00\ \mu\text{m}$ .



What is the angular separation ( $\theta_2 - \theta_1$ ) between the first and second order maxima of the yellow light?

- A**  $17.5^\circ$       **B**  $19.4^\circ$       **C**  $36.9^\circ$       **D**  $54.3^\circ$

**Space for working**