

- 28** Light of wavelength 720 nm from a laser X is incident normally on a diffraction grating and a diffraction pattern is observed. Light from a laser Y is then also incident normally on the same grating. The third-order maximum due to laser Y is seen at the same place as the second-order maximum due to laser X.

What is the wavelength of the light from laser Y?

- A** 480 nm **B** 540 nm **C** 720 nm **D** 1080 nm

- 29** Monochromatic light of frequency f is incident normally on a diffraction grating. The second-order maximum is seen at an angle θ to the normal. The wavelength of the light is λ .