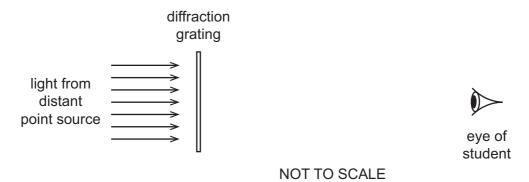
**30** Light of a single wavelength from a distant point source falls normally onto a diffraction grating positioned with its lines vertical.



The plane of the diffraction grating is at right angles to the incident light. A student looks at the grating from a position near to the grating.

What could the student see?

- A a central point source with a series of point source images on either side
- **B** a central vertical line with a series of spectra on either side
- C a series of fine vertical lines
- **D** a single point source
- 31 Which diagram best represents the electric field between two point charges of equal magnitude and opposite sign?

