30 Light of wavelength 5.5×10^{-7} m is incident normally on a diffraction grating.
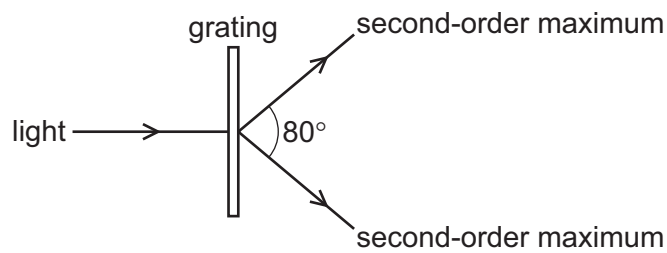

The angle between the second-order diffraction maxima is 80°, as shown.

What is the number of lines per metre of the diffraction grating?

A 5.8×10^5 lines per metre

B 9.0×10^5 lines per metre

C 1.2×10^6 lines per metre

D 2.3×10^6 lines per metre

31 Four diagrams representing the electric field between two oppositely charged point charges are shown.

Which diagram correctly shows the electric field lines?