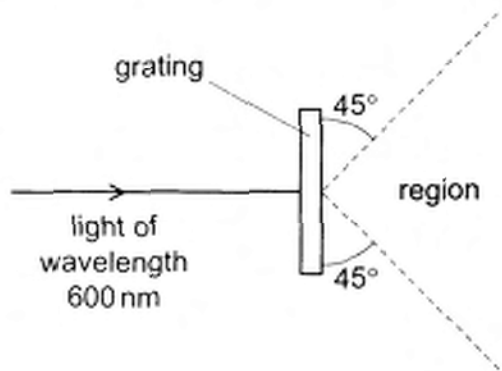


- 22 A parallel beam of light of wavelength 600 nm is incident normally on a diffraction grating. The grating has 500 lines per millimetre.



How many beams of coherent light emerge from the grating within the shaded  $90^\circ$  region shown in the diagram?

A 2

B 3

C 4

D 5