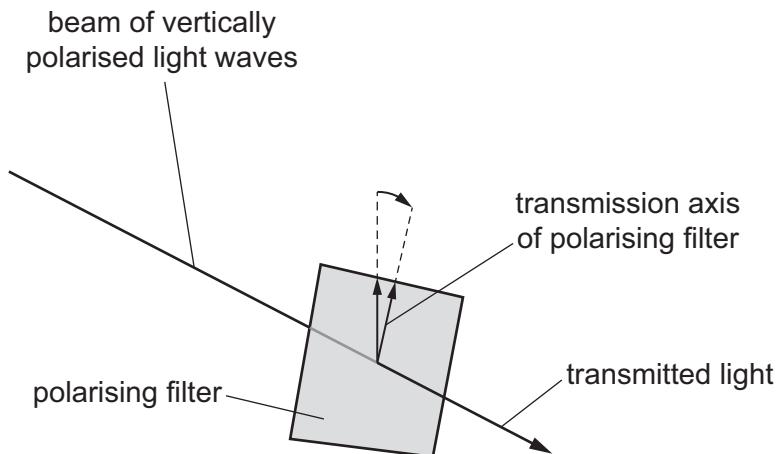


- 24** A beam of vertically polarised light is incident normally on a polarising filter. The filter can be rotated so that it is always in a plane perpendicular to the beam. The transmission axis of the filter is initially vertical.



The filter is first rotated clockwise by an angle of 30° so that the transmitted light waves have intensity I_{30} . The filter is then rotated clockwise by a further angle of 30° .

What is the new intensity of the transmitted light waves?

- A** $0.25 I_{30}$ **B** $0.33 I_{30}$ **C** $0.75 I_{30}$ **D** $0.87 I_{30}$