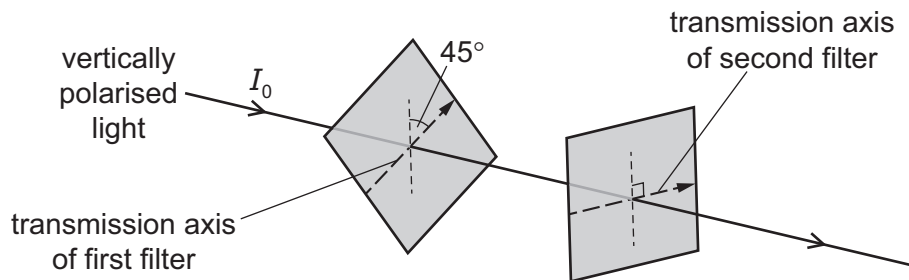


- 24** A vertically polarised beam of light of intensity I_0 is incident normally on a polarising filter.

The transmission axis of the filter is at 45° to the vertical. The beam of light transmitted by this filter is then incident normally on a second filter. The transmission axis of the second filter is horizontal.



What is the intensity of the beam of light after transmission through the second filter?

- A** 0 **B** $\frac{1}{4} I_0$ **C** $\frac{1}{2} I_0$ **D** I_0
- 25** A stationary wave is formed by two progressive waves travelling in opposite directions along the same line of travel.

Which statement about the two progressive waves is **not** correct?

- A** They must have a constant phase difference.
B They must have the same frequency.
C They must have the same wavelength.
D They must travel at the same speed.