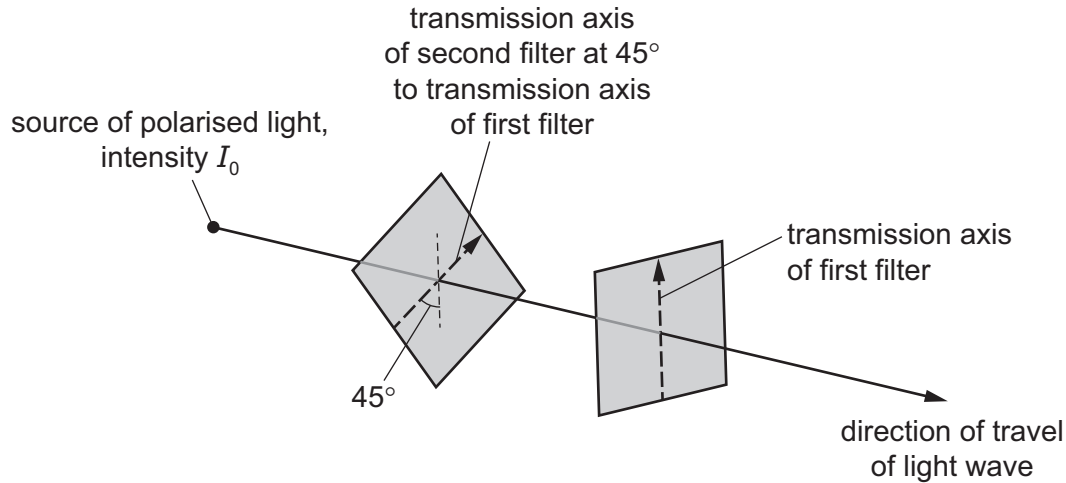


- 24** A plane polarised light wave of intensity I_0 is incident normally on a polarising filter. The initial intensity of the transmitted wave is 0.

A second polarising filter is then inserted between the source and the first filter. Its transmission axis is at 45° to the transmission axis of the first filter, as shown.



What is the intensity of the transmitted wave from the filter combination?

- A** 0 **B** $\frac{I_0}{8}$ **C** $\frac{I_0}{4}$ **D** $\frac{I_0}{2}$