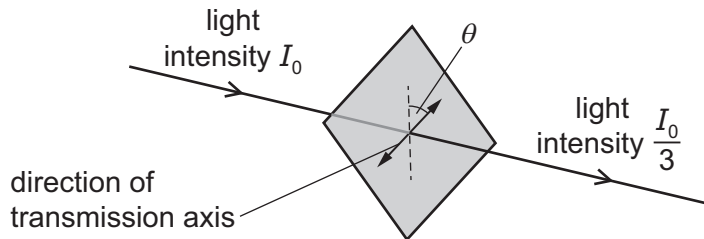**27** Vertically polarised light of intensity I_0 is incident normally on a polarising filter.

The transmission axis of the filter is at an angle θ to the plane of polarisation of the light.

The intensity of the light after passing through the filter is $\dfrac{I_0}{3}$.

light
intensity I_0

θ

light
intensity $\dfrac{I_0}{3}$

direction of
transmission axis

What is θ?

A 8.4°   **B** 55°   **C** 71°   **D** 84°