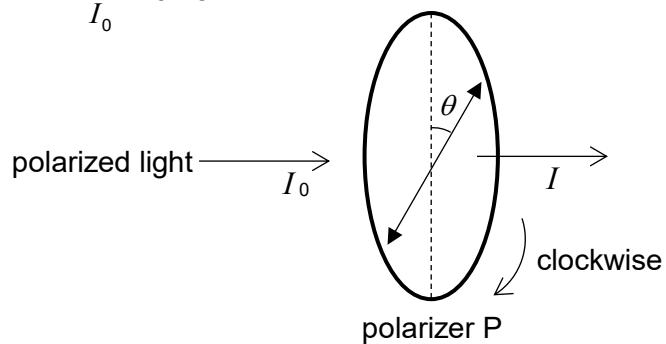


- 16** A beam of vertically polarised light of intensity I_0 is incident on a polariser P. The axis of polarisation of P is initially at an angle θ from the vertical. Light after passing through P has an intensity I . The ratio $\frac{I}{I_0}$ is 0.25.



P is rotated 30° clockwise such that the axis of polarisation is now $\theta + 30^\circ$ from the vertical.

What is the new ratio $\frac{I}{I_0}$?

A 0

B 0.27

C 0.75

D 0.87

