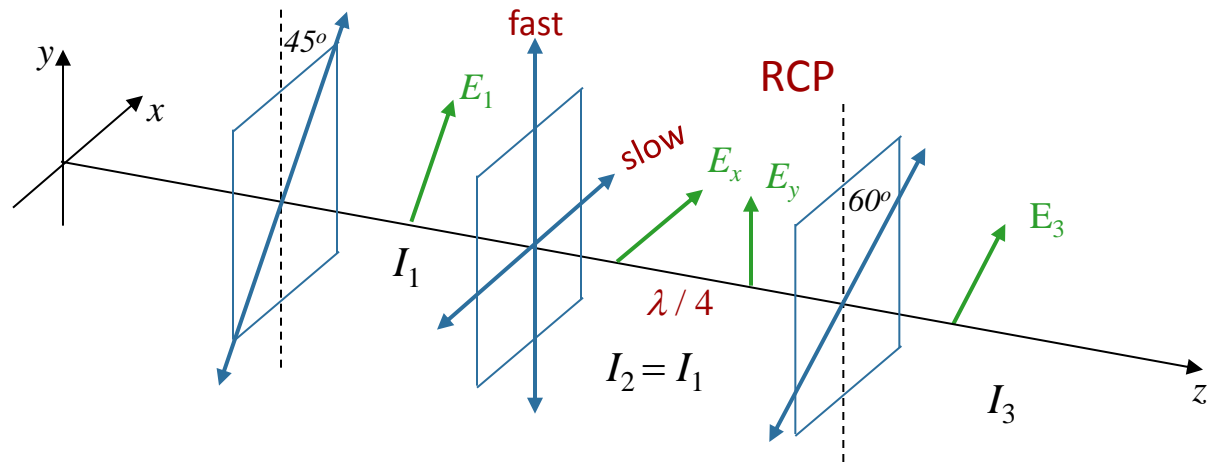


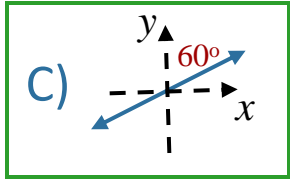
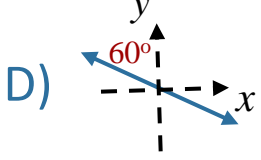
Calculation



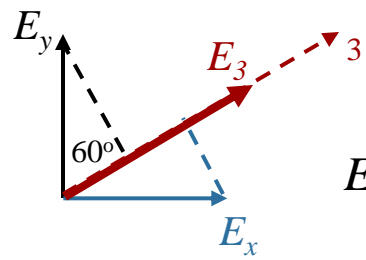
Light is incident on two linear polarizers and a quarter wave plate (QWP) as shown.



What is the polarization of the light after the 60° polarizer?

- A) LCP
- B) RCP
- C) 
- D) 
- E) un-polarized

Absorption: only passes components of E parallel to TA ($\theta = 60^\circ$)



$$E_3 = E_x \sin \theta + E_y \cos \theta$$

$$E_3 = \frac{E_1}{\sqrt{2}} (\cos(kz - \omega t) \sin \theta + \sin(kz - \omega t) \cos \theta)$$

$$E_3 = \frac{E_1}{\sqrt{2}} (\sin(kz - \omega t + \theta))$$

