

King Fahd University of Petroleum and Minerals  
Department of Physics

Name:  
ID#:

PHYS 205 prelab Quiz-10/07/2020  
**Due time 12:30 pm**

Show detailed solution using **your hand writing only on white paper**, typing or printing will not be accepted. Then, take clear image of your answer and then send it to my email

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Q: As shown in the figure below, unpolarized light with intensity  $I_0$  is initially incident on the three polarizers in a line. The first polarizer has a polarizing direction that is vertical. The second polarizer has a polarizing angle of  $45.0^\circ$  with respect to the vertical. The third polarizer has a polarizing angle of  $90.0^\circ$  with respect to the vertical. Calculate the percentage of light intensity that will exit the third polarizer relative to  $I_0$ ?

