1-Problem 5.7 (K&F)

2- With regard to Young’s double slit experiment, derive a general expression for the shift in the vertical position of the $m$th maximum as a result of placing a thin sheet of glass with index $n$ and thickness $d$ directly over one of the slits. Identify your assumptions.

3-Problem 5.22 (K&F)

4- White light falling on two long narrow slits emerges and is observed in a distant screen. If red light ($\lambda_0=780$ nm) in the first order fringe overlaps violet in the second order fringe, what is the latter’s wavelength?