## **PHYS 380**

## **HOMEWORK #7**

## For discussion on Oct 27 and submission on Nov. 1

## All questions from the text:

- 1. 9.1 This will give you a chance to do calculations with energy density, flux, and think about the nature of the radiation in your eye.
- 2. 9.6
- 3. 9.8. You should be able to obtain an expression for the optical depth of the earth's atmosphere based in terms of the intensities  $I_1$  and  $I_2$  and the angles  $\theta_1$  and  $\theta_2$ . You should also be able to derive an expression for the intensity at the top of the earth's atmosphere in terms of intensities and angles.
- 4. 9.21
- 5. 9.24
- 6. 9.26