Homework 4.

- 1) A wave is incident at an angle of  $30^0$  from air to Teflon ( $\varepsilon_r = 2.1$ ). Calculate the angle of transmission, and repeat with an interchange of the regions.
- 2) In question (1), find the critical angle for a wave propagating from Teflon into free space.
- 3) Find the Brewster angle for a parallel-polarized wave traveling from air into glass for which  $\varepsilon_r = 5.0$ .