

Physics 110B. Electricity and Magnetism. Professor Dine

Spring, 2008. Homework Set 2. Due Thursday, April 24.

Problem numbers refer to your textbook.

1. 9.10
2. 9.11
3. 9.12
4. 9.14
5. Suppose that in a medium ϵ has an imaginary part much smaller than its real part, $\epsilon = \epsilon_r + i\epsilon_i$, $\epsilon_i \ll \epsilon_r$. Solve equation 9.69 for the real and imaginary parts of n . Write the form of the wave, and discuss attenuation.