

Homework Assignment 7 due Monday October 21
(There will be a quiz in class Friday October 18.)

7-1. Jackson Problem 7.2

7-2. Jackson Problem 7.3

7-3. Jackson Problem 7.4

Consider only one of the two cases :

assume the incident wave is linearly polarized perpendicular to the plane of incidence.

7-4. Jackson Problem 7.19

7-5. Model a "nearly transparent medium" as a material with index of refraction n and electric conductivity g . Show that the attenuation length δ is $\delta = \frac{2n}{g\Omega_0}$ where $\Omega_0 = \sqrt{\mu_0/\epsilon_0}$. Calculate the value of Ω_0 in ohms.