Prep guide – Reflection and transmission coefficients

Big picture goal – To come up with equations that tell us exactly how much of a wave is reflected at a dielectric interface.

1) How are reflectivity R and transmissivity T defined?

2) Be able to write a few sentences qualitatively describing the process of finding reflected and transmitted field amplitudes in terms of the incident field amplitude.

3) Make sure you know how to keep track of the relative orientation of $\vec{E}$ and $\vec{B}$ when setting up boundary condition equations.

4) Take special note of how the coefficients *R* and *T* sometimes depend on $\varepsilon$ as well as electric field ratios.