Stuff to Grok (wk 2)

- A T-line of infinite length can be modeled by a resistor whose value equals the characteristic impedance of the T-line.
- For a source-terminated T-line, the incident wave will be:

$$V_1^+ = V_S \left(\frac{Z_0}{Z_0 + R_S} \right)$$

- For open-circuit load on a T-line, $\rho_L = 1$ and the reflection is equal in amplitude and identical in polarity.
- For short-circuit load on a T-line, $\rho_L = -1$ and the reflection is equal in amplitude and of the opposite polarity as the incoming wave.
- For T-lines terminated in their characteristic impedance, there is no reflection.
- At any impedance discontinuity a reflection will be generated.
- ρ at load or source is $\frac{\text{reflected voltage}}{\text{incident voltage}}$
- $\rho_L = \frac{R_L - Z_0}{R_L + Z_0}$; $\rho_S = \frac{R_S - Z_0}{R_S + Z_0}$
- Be able to use + create a lattice diagram