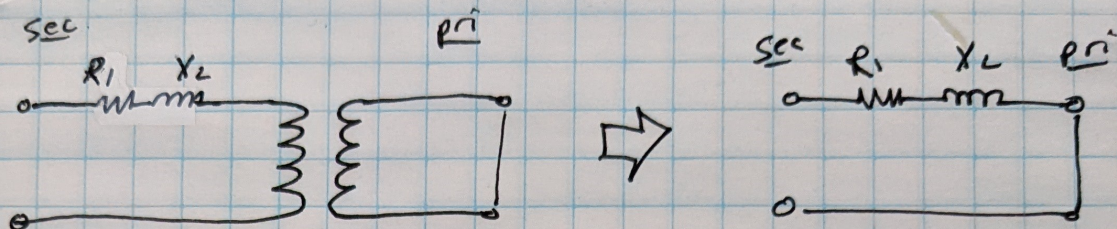


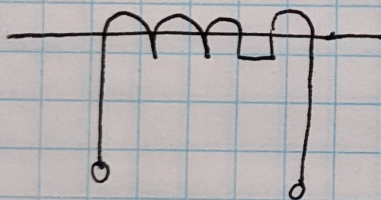
CT PRIMARY SHORTED

Eq. Circuit
for transformer
Short Circuit Test



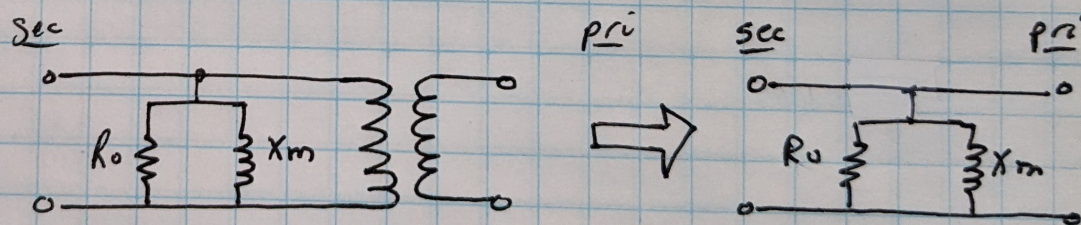
R_1 : Winding Resistance ($< 2\Omega$ usually)

X_1 : leakage reactance - caused by flux that escapes the core and does not induce current in sec. wdg. (very low for 'C' class CT's)



CT PRIMARY OPEN CIRCUIT

Eq. Circuit
for transformer
Open Circuit Test



R_0 : core I^2R losses, non-inductive resistance

X_m : magnetizing reactance.

$$R + jX_m = \bar{Z}_{oc}$$

looking at a CT excitation test, $\bar{Z}_{oc}$ ranges between 300Ω - 900Ω