

$$V_{TH} = K \underline{V_{in}}$$

$$Z_T = K^2 Z_{load}$$

$$I = \frac{V_{TH}}{Z_{line} + Z_T} = \frac{K \underline{V_{in}}}{Z_{line} + K^2 Z_{load}}$$

$$S_{line} = \frac{V_{line} I^*}{2}$$

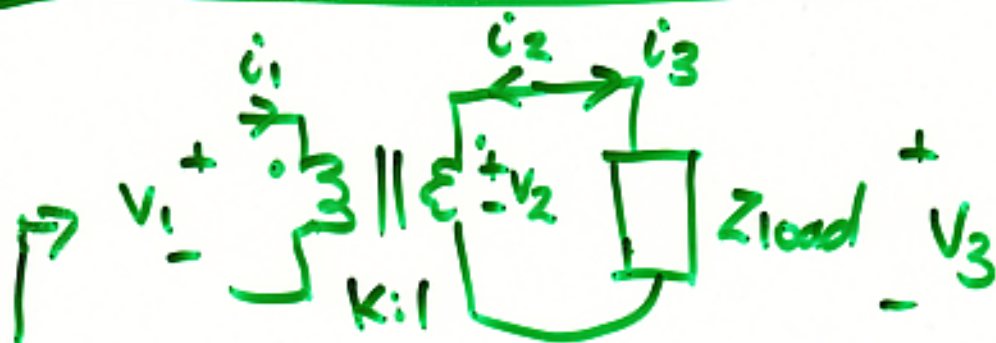
$$V_{line} = Z_{line} I$$

$$S_{line} = \frac{Z_{line} |I|^2}{2}$$



$$V_2(t) = n V_1(t)$$

$$i_1(t) = -n i_2(t)$$



$$Z_T = \frac{V_1}{I_1}$$

$$= k^2 Z_{load}$$

$$V_2 = \frac{1}{k} V_1$$

$$I_2 = -k I_1$$

$$V_3 = Z_{load} I_3$$

$$V_3 = V_2$$

$$I_3 = -I_2$$