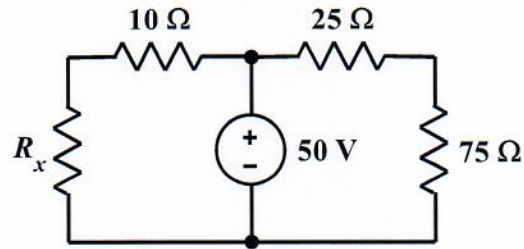


EE/EET 2240
Homework Problem #028



(a) What value of R_x will absorb maximum power from the remainder of the circuit?

$$R_x = 10\Omega \quad \text{will absorb maximum power}$$

(b) How much power will it absorb?

$$R_T = 10\Omega$$

$$V_T = 50V$$

$$P_x = \frac{\left(\frac{1}{2} V_T\right)^2}{R_x} = \frac{(25V)^2}{10\Omega} = 62.5W$$