PROBLEM 4

$$V_1 = I_1 \cdot R_1 \Rightarrow V_1 = I$$

$$\frac{3}{1000} = I_1 \cdot (1000)$$

$$I_1 = 0.003 A = 3 \text{ with}$$

$$P_0 = I_0 \cdot V_0$$

$$P_0 = 0.003 - 2$$

$$P_0 = 0.006 = 6 \text{ with}$$