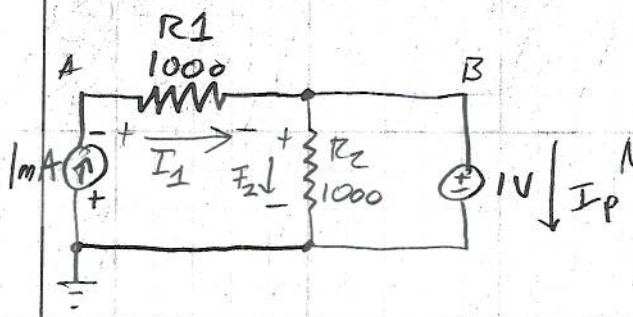
Problem 9 - (2pts)

Use the node method to find power dissipated by the 1mA current source



$B = 1V$

Node A: $1mA - I_1 = 0$

$I_1 = 1mA$

$$I_1 = \frac{V_a - 1}{1000}$$

$$1mA = \frac{V_a - 1}{1000}$$

$$1 = V_a - 1$$

$$2 = V_a$$

$P_{diss} = V \cdot I$

$V = V_{positive} - V_{negative}$

$V = 0 - 2V$

$V = -2V$

$P_{diss_{1mA}} = -2V(1mA) = -2mW$

$\boxed{P_{diss_{1mA}} = -2\,mW}$ (2pts)

Note: $I_p = \emptyset\ A$