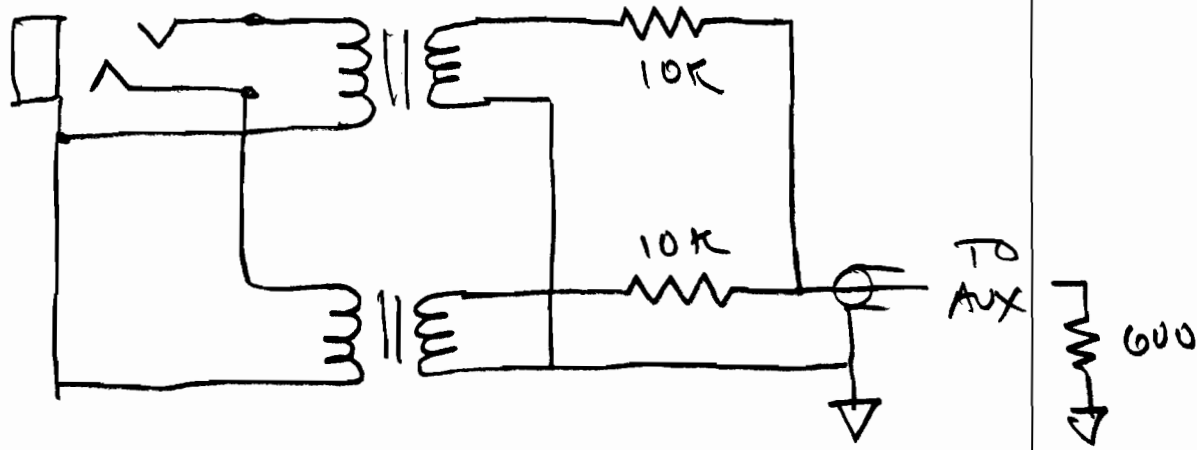
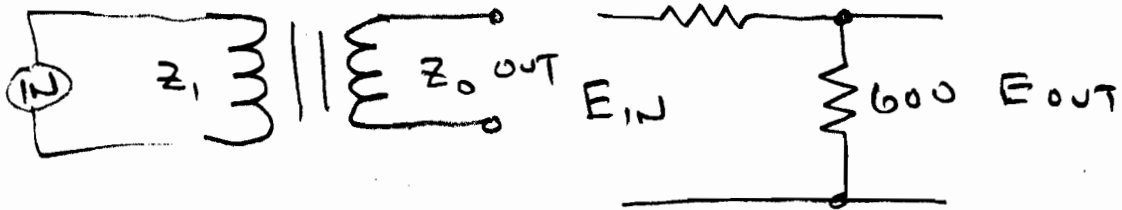


①

$8\Omega: 2000\Omega$   
 $1T: 16T$



$8\Omega: 2000\Omega$



$$E_{OUT} = E_{IN} \sqrt{Z_0/Z_1}$$

$$E_{OUT} = E_{IN} \left( \frac{600}{10k + 600} \right)$$

$$= E_{IN} \sqrt{250}$$

$$E_{OUT} = .0566 E_{IN}$$

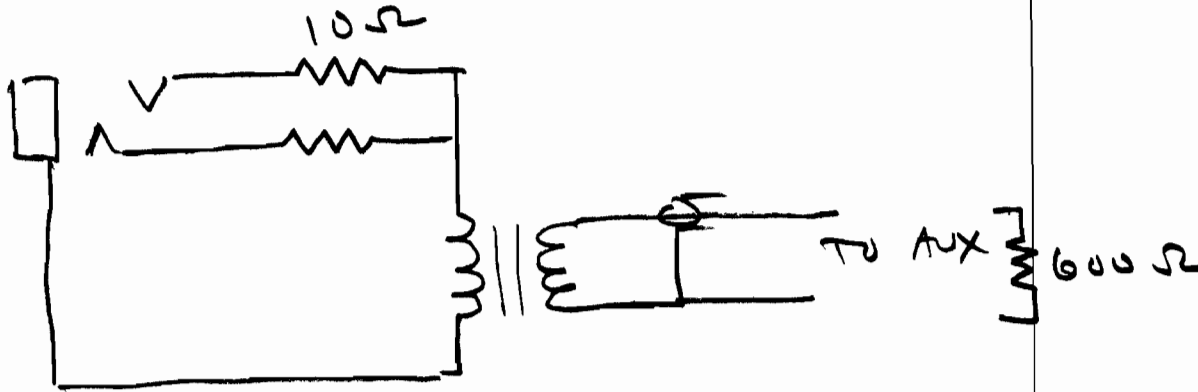
$$E_{OUT} = E_{IN} (16)$$

$$E_{OUT} = E_{IN} (16 \times .0566)$$

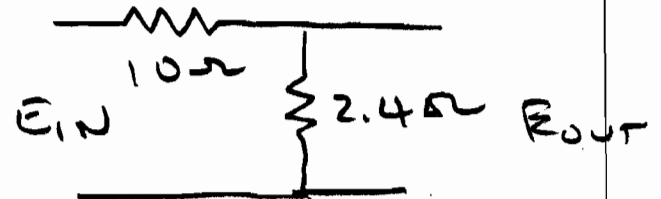
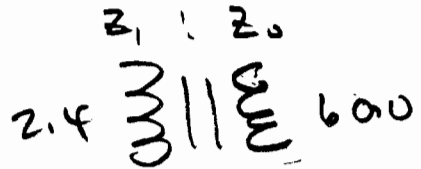
$$E_{OUT} = .905 E_{IN}$$

$$Z_{IN} = Z_L / (Z_1/Z_0) = 10600 / 250 = 42 \Omega$$

2



82:2000  
1T:16T



REFLECTED

$$Z_{IN} = Z_L (Z_p / Z_s)$$

$$= 600 (8 / 2000)$$

$$= 600 (0.004)$$

$$= 2.4 \Omega$$

$$E_{OUT} = E_{IN} \left( \frac{2.4}{10 + 2.4} \right)$$

$$= E_{IN} \left( \frac{2.4}{12.4} \right)$$

$$= E_{IN} (.19)$$

INPUT LOAD Z

$$= 10 \Omega + 2.4 \Omega$$

$$= 12.4 \Omega$$

OVERALL OUTPUT VOLTAGE =

TRANSFORMER "GAIN" X

$$= 16 \times .19$$

$$= 3.04$$