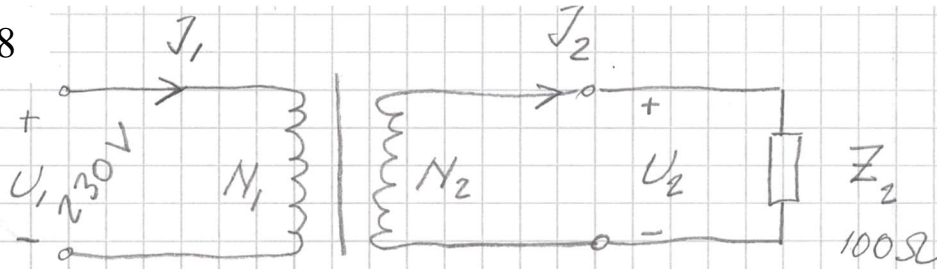


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a)

$$\frac{N_1}{N_2} = \frac{U_1}{U_2} \dots (1)$$

$$\frac{N_1}{N_2} = \frac{240}{24} = 10$$

U_{1n} och U_{2n} är
TRANSFORMATORNS
"MÄRKSPÄNNINGAR"

$$\text{INS } | (1) \Rightarrow 10 = \frac{230}{U_2} \Rightarrow U_2 = 23V$$

b)

$$I_2 = \frac{U_2}{Z_2} \Rightarrow I_2 = 0,23 A$$

IDEAL TRANSFORMATOR

$$\Rightarrow U_1 I_1 = U_2 I_2$$

$$I_1 = \frac{U_2 I_2}{U_1} \Rightarrow I_1 = 23 \text{ mA}$$

c)

$$Z_1 = \frac{U_1}{I_1} \Rightarrow Z_1 = 10 \text{ k}\Omega$$