

ΛΥΣΕΙΣ ΑΣΚΗΣΕΩΝ Μ/Σ

10. (Σ-71) και 19 (Σ-72)

$$\frac{U1}{U2} = \frac{220}{44} = 5 \quad \frac{W1}{W2} = K \Rightarrow W2 = \frac{W1}{K} = \frac{500}{5} = 100 \text{ σπείρες}$$

$$Z1 = 500\Omega$$

$$Z1 = K^2 * Z2 \Rightarrow Z2 = \frac{Z1}{K^2} = \frac{500}{5^2} = 20 \Omega.$$

11. (Σ-71)

$$\frac{U1}{U2} = K \Rightarrow \frac{220}{22} = 10 = K \quad \frac{I2}{I1} = K \Rightarrow I1 = \frac{I2}{K} = \frac{4}{10} = 0,4\text{A}$$

12. (Σ-71)

$$\frac{W1}{W2} = \frac{200}{5000} = K = 0,04 \quad U2 = \frac{U1}{K} = \frac{8,8}{0,04} = 220 \text{ V}$$

$$Z2 = \frac{U2}{I2} \Rightarrow I2 = \frac{U2}{Z2} = \frac{220}{10000} = 0,022 \text{ A} \quad \text{ή} \quad \mathbf{22 \text{ mA}}$$

$$I1 = \frac{I2}{K} = \frac{0,022}{0,04} = 0,55 \text{ A.}$$

14. (Σ-71)

$$\frac{W1}{W2} = \frac{U1}{U2} \Rightarrow W1 = \frac{W2 * U1}{U2} = \frac{52 * 2800}{230} = 633 \text{ σπείρες}$$