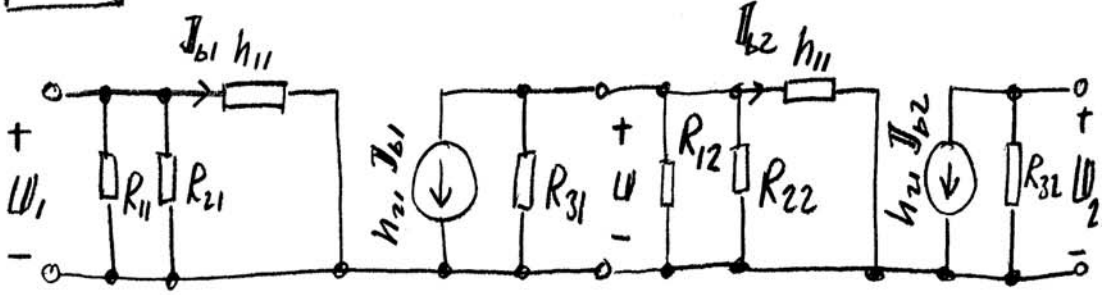
E13



$$F = \frac{U_2}{U_1} = \frac{U_2}{U} \cdot \frac{U}{U_1} \quad \ldots (1)$$

$$U_2 = -R_{32} \cdot h_{21} I_{b2} \quad \ldots (2)$$

$$U = h_{11} I_{b2} \quad \ldots (3)$$

$$U = -R \cdot h_{21} I_{b1} \quad \ldots (4)$$

DÄR $R = R_{31} \parallel R_{12} \parallel R_{22} \parallel h_{11}$

$$U_1 = h_{11} I_{b1} \quad \ldots (5)$$

(2), (3), (4) OCH (5) INS I (1) →

$$F = \ldots = \underline{4800}$$

$$Z_{in} = R_{11} \parallel R_{21} \parallel h_{11} = \underline{923\ \Omega}$$

$$Z_{ut} = R_{32} = \underline{1\ k\Omega}$$