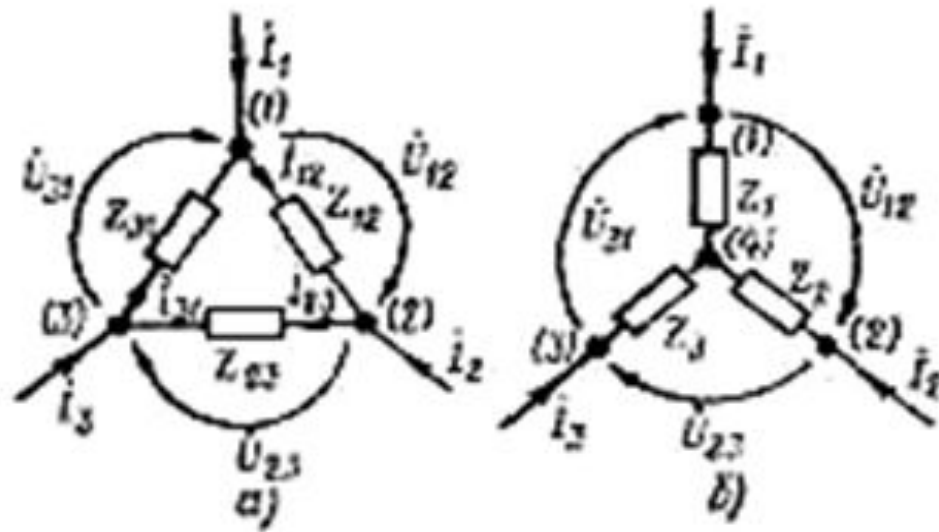


Эквивалентное преобразование треугольника сопротивлений в звезду и



$$\dot{U}_{12} = Z_{12} \dot{I}_{12} = Z_{12} (\dot{I}_1 - \dot{I}_2) = Z_{12} (\dot{I}_1 - \dot{I}_2);$$

$$\dot{U}_{23} = Z_{23} \dot{I}_{23} = Z_{23} (\dot{I}_2 - \dot{I}_3) = Z_{23} (\dot{I}_2 - \dot{I}_3).$$

$$\dot{U}_{12} = Z_1 \dot{I}_1 - Z_2 \dot{I}_2;$$

$$\dot{U}_{23} = Z_2 \dot{I}_2 - Z_3 \dot{I}_3.$$

$$\frac{Z_{12} Z_{31}}{Z_{12} + Z_{23} + Z_{31}} \dot{I}_1 - \frac{Z_{12} Z_{23}}{Z_{12} + Z_{23} + Z_{31}} \dot{I}_2 = Z_1 \dot{I}_1 - Z_2 \dot{I}_2;$$

$$\frac{Z_{23} Z_{12}}{Z_{12} + Z_{23} + Z_{31}} \dot{I}_2 - \frac{Z_{23} Z_{31}}{Z_{12} + Z_{23} + Z_{31}} \dot{I}_3 = Z_2 \dot{I}_2 - Z_3 \dot{I}_3.$$