

Alkuduruttt ällapotbau

$$\bar{Z} = R + j(X_L - X_C) = 5 e^{j36,87^\circ} \Omega$$

$$\bar{U}_g = 100 e^{j36,87^\circ} \text{ V}$$

$$\bar{I} = \bar{U}_g / \bar{Z} = 20 e^{j0^\circ} \text{ A}$$

$$\bar{U}_R = R \bar{I} = 80 e^{j0^\circ} \text{ V}$$

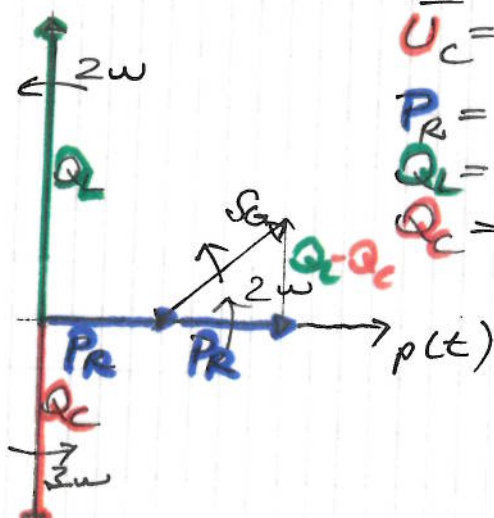
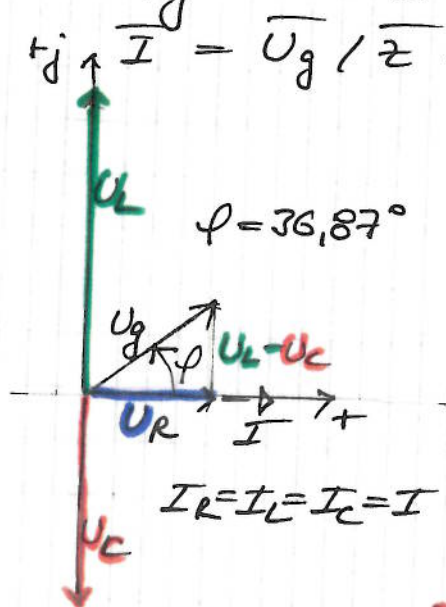
$$\bar{U}_L = jX_L \bar{I} = 200 e^{j90^\circ} \text{ V}$$

$$\bar{U}_C = -jX_C \bar{I} = 140 e^{-j90^\circ} \text{ V}$$

$$P_R = U_R I_R = 1600 \text{ W}$$

$$Q_L = U_L I_L = 4000 \text{ Var}$$

$$Q_C = U_C I_C = 2800 \text{ Var}$$



$$W_{CR} = \frac{1}{2} C U_C^2$$

$$W_{LR} = \frac{1}{2} L I_L^2$$

