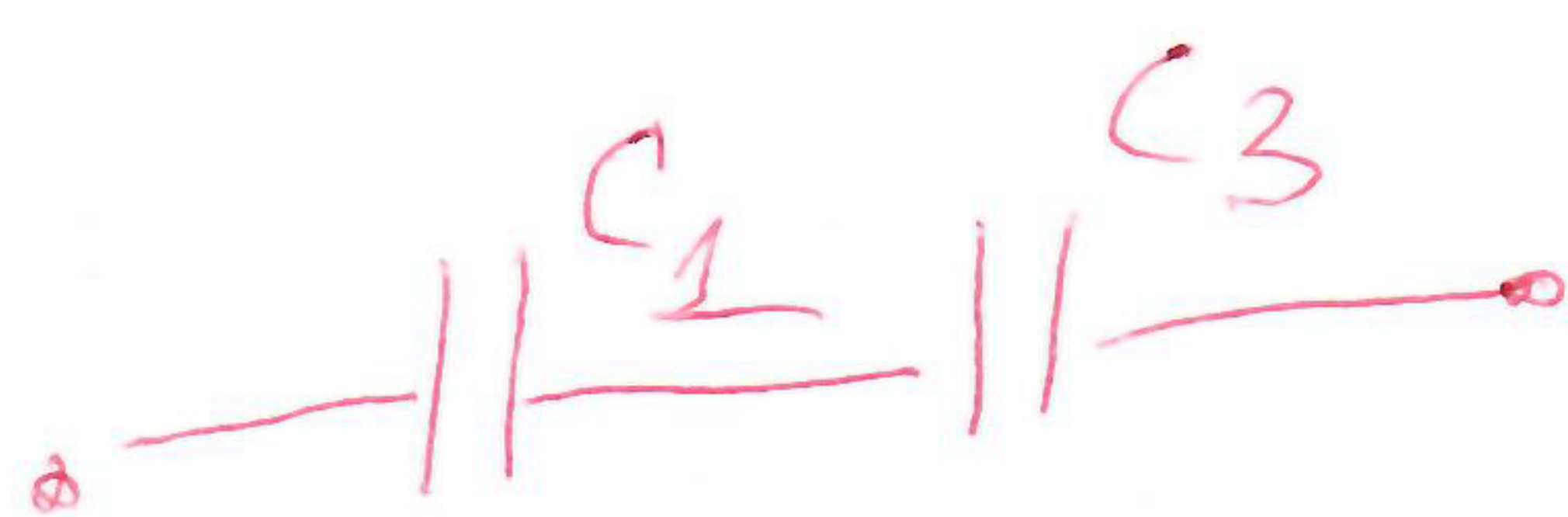


② u jednom kolu kapacitivnost $C_1 = 450 \text{ pF}$ treba smanjiti na $C_2 = 90 \text{ pF}$, pomoću kapacitivnosti C_3 , kako povezati C_3 , kolika je tipova kapacitivnost

Rješenje:



← redna veza!!!

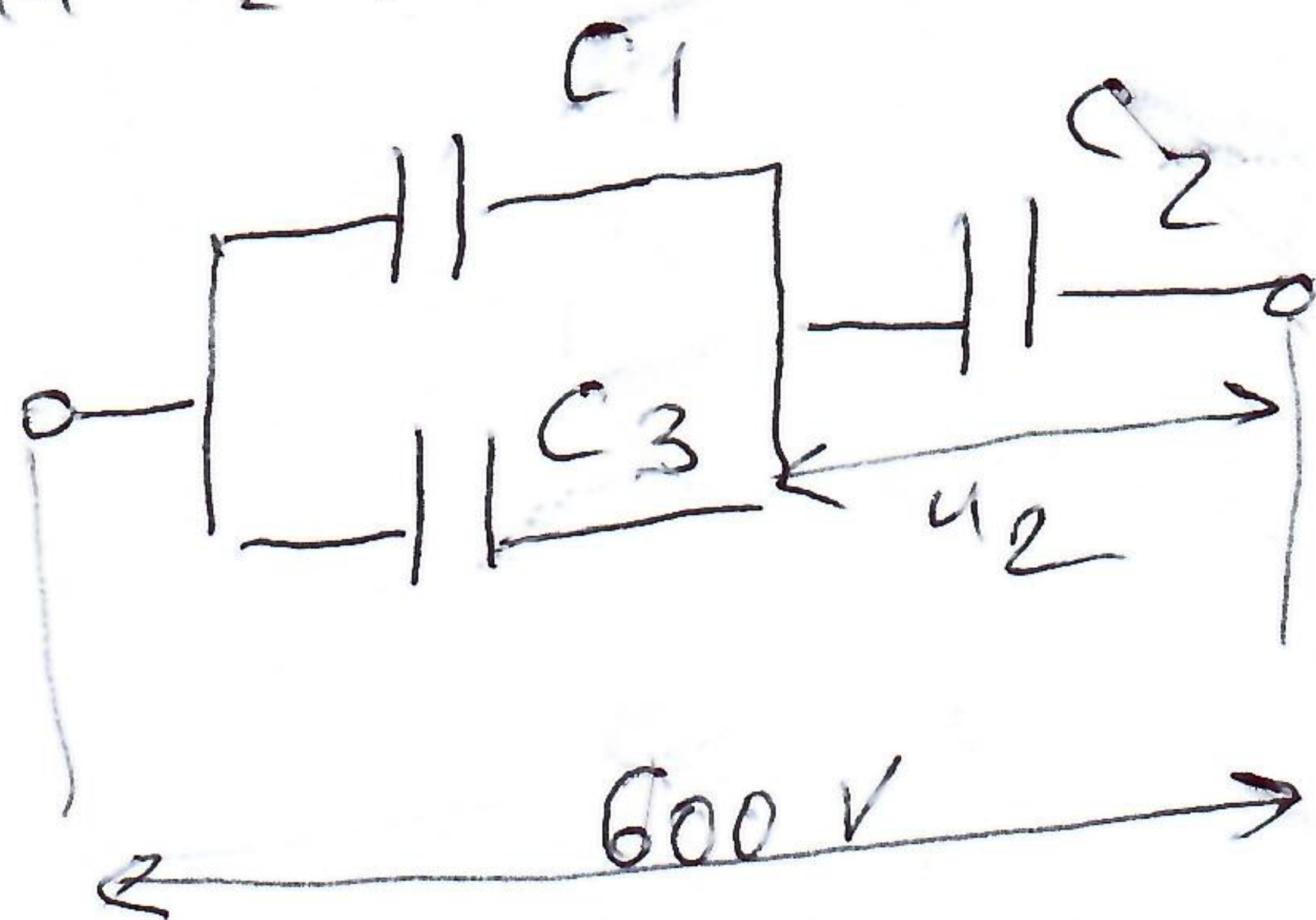
$$C_2 = 90 \text{ pF} = \frac{450 \cdot C_3}{450 + C_3}$$

$$90_{\text{pF}} \cdot 450_{\text{pF}} + 90_{\text{pF}} C_3 = 450 C_3$$

$$90_{\text{pF}} + 450_{\text{pF}} = 360 C_3 \text{ pF}$$

$$C_3 = \frac{450}{4} \text{ pF} (112,5 \text{ pF})$$

③ Kondenzatori kapaciteta $C_1 = 3 \mu\text{F}$ i $C_2 = 6 \mu\text{F}$ vezani su redno i priključeni na napon $U = 600 \text{ V}$. Kolika kapacitivnost C_3 treba vezati paralelno C_1 da bi napon na C_2 bio $U_2 = 360 \text{ V}$?



$$U_1 = U_3 = U_{13} = U - U_2 = 240 \text{ V}$$

$$Q = Q_2 = U_2 C_2 = 2160 \cdot 10^{-6} \text{ C}$$

$$Q_1 = U_1 C_1 = 240 \cdot 3 \cdot 10^{-6} = 720 \mu\text{C}$$

$$Q = Q_1 + Q_3 \Rightarrow Q_3 = 1440 \mu\text{C}$$

$$C_3 = \frac{Q_3}{U_3} = 6 \mu\text{F}$$