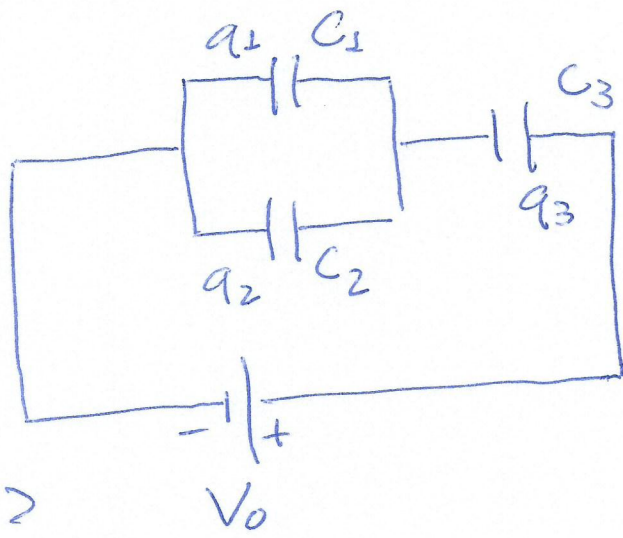


$$1) C_1 = C_2 = C_3 = C_0$$

$$a) C_{eq} = ?$$

$$b) \text{Carga Total} = ?$$

$$c) \text{Cargas } q_1, q_2 \text{ e } q_3 = ?$$



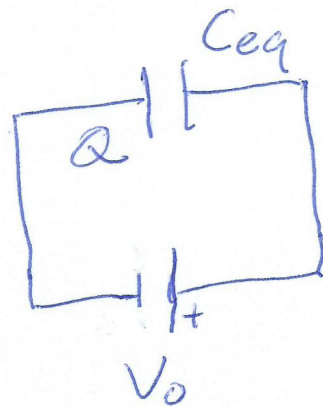
$$a) C_{12} = C_1 + C_2$$

$$\frac{1}{C_{eq}} = \frac{1}{C_{12}} + \frac{1}{C_3} = \frac{1}{C_1 + C_2} + \frac{1}{C_3}$$

$$\text{supondo } C_1 = C_2 = C_3 = C_0$$

$$\frac{1}{C_{eq}} = \frac{1}{2C_0} + \frac{1}{C_0} = \frac{1+2}{2C_0} = \frac{3}{2C_0}$$

$$\boxed{C_{eq} = \frac{2C_0}{3}}$$



$$b) \text{Carga total } Q$$

$$Q = C_{eq} V_0 = \frac{2}{3} C_0 V_0$$

$$c) \quad C_1 \text{ e } C_2 \Rightarrow \text{Paralelo} \Rightarrow \boxed{V_1 = V_2}$$

$$C_{12} \text{ em s\u00e9rie de } C_3 \Rightarrow \boxed{q_1 + q_2 = q_3}$$

$$q_3 = Q = \frac{2}{3} C_0 V_0$$

$$\left. \begin{array}{l} q_1 = C_1 V_1 = C_0 V_1 \\ q_2 = C_2 V_2 = C_0 V_1 \end{array} \right\} q_1 = q_2$$

$$q_1 + q_2 = q_3$$

$$2q_1 = q_3$$

$$q_1 = \frac{q_3}{2} = \frac{C_0 V_0}{3} = q_2$$