

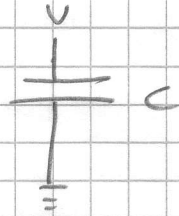
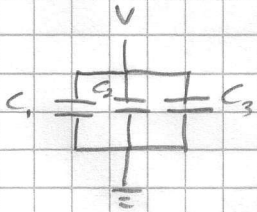
Capacitors



$$Q = CV$$

$$\rightarrow C = \frac{Q}{V}$$

$$I = C \frac{dV}{dt}$$

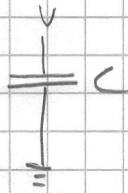
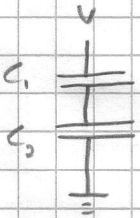


$$\rightarrow Q_1 + Q_2 + Q_3 = Q$$

$$C_1 V + C_2 V + C_3 V = CV$$

Capacitors in parallel

$$\rightarrow C = C_1 + C_2 + C_3$$



$$\rightarrow V_1 + V_2 = V$$

$$\frac{Q}{C_1} + \frac{Q}{C_2} = \frac{Q}{C}$$

Capacitors in series

$$\rightarrow C = \frac{Q_1 Q_2}{Q_1 + Q_2}$$

Constant I

