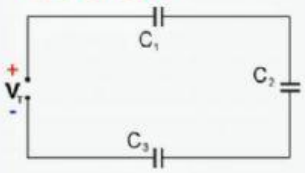
CONDENSADORES EN SERIE Y PARALELO

En Serie

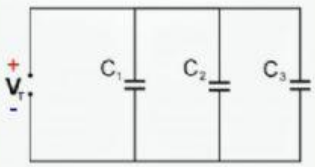


$Q_T = Q_1 = Q_2 = Q_3$

$V_T = V_1 + V_2 + V_3$

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

En Paralelo



$Q_T = Q_1 + Q_2 + Q_3$

$V_T = V_1 = V_2 = V_3$

$C_{EQ} = C_1 + C_2 + C_3$

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

Donde:
C= capacidad (F)
Q= carga (C)
V= voltaje (Vol)

$1\mu F = 10^{-6} F$

$1pF = 10^{-12} F$

$1nF = 10^{-9} F$

LIVEWORKSHEETS

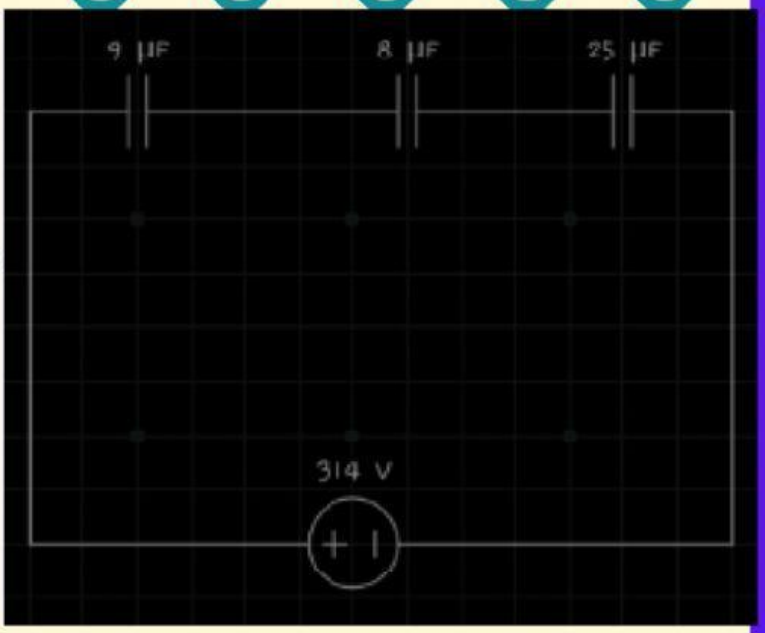
$Q_T = Q_1 = Q_2 = Q_3$

$V_T = V_1 + V_2 + V_3$

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

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

$C_1 = 9\mu F$
$C_2 = 8\mu F$
$C_3 = 25\mu F$



Calcula la capacidad total

$$\frac{1}{C_T} = \frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3}$$

$$\frac{1}{C_T} = \frac{1}{.....} + \frac{1}{.....} + \frac{1}{.....}$$

$$\frac{1}{C_T} = ...$$

$$C_T = ... = ... x10$$

Calcula la carga total y unitaria

$$Q_T = C_T * V_T$$

$$Q_T = ... x10 \ * .....$$

$$Q_T = ... x10 .....$$

$$Q_1 = ... x10 .....$$

$$Q_2 = ... x10 .....$$

$$Q_3 = ... x10 .....$$

Calcula el voltaje unitario

$$V_1 = \frac{Q_1}{C_1} = \frac{x10}{x\,10} = ...$$

$$V_2 = \frac{Q_2}{C_2} = \frac{x10}{x\,10} = ...$$

$$V_3 = \frac{Q_3}{C_3} = \frac{x10}{x\,10} = ...$$

$$V_T = ... + ... + ... = ...$$

LIVEWORKSHEETS

$Q_T = Q_1 + Q_2 + Q_3$

$V_T = V_1 = V_2 = V_3$

$C_{EQ} = C_1 + C_2 + C_3$

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

$C_1 = 4\mu F$

$C_2 = 5,3\mu F$

Calcula la capacidad total

$$C_T = C_1 + C_2$$

$$C_T = \ldots\ldots + \ldots\ldots = \ldots\ldots F = \ldots\ldots x10^{-6}F$$

Calcula el voltaje total y unitario

$$V_T = \ldots\ldots vol = V_1 = V_2$$

Calcula la carga total y unitaria

$$Q_T = C_T * V_T = \ldots\ldots x10^{-6}F * \ldots\ldots vol = \ldots\ldots x10^{-3}$$
$$Q_1 = C_1 * V_1 = \ldots\ldots x10^{-6}F * \ldots\ldots vol = \ldots\ldots x10^{-3}$$
$$Q_2 = C_2 * V_2 = \ldots\ldots x10^{-6}F * \ldots\ldots vol = \ldots\ldots x10^{-3}$$

LIVEWORKSHEETS