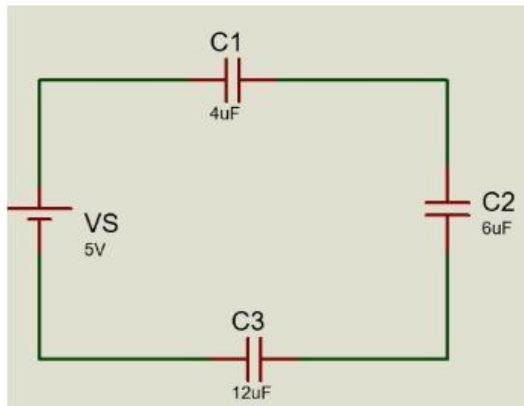
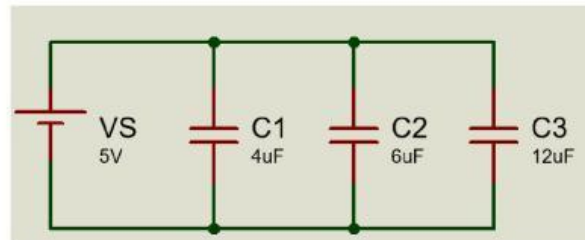


Rajah menunjukkan dua litar kapasitor:

Hitungkan **Jumlah Kapasitans, C_T** bagi:



1. Litar sesiri



Litar selari

PENYELESAIAN:

Jumlah Kapasitans bagi Litar Sesiri

(a) Jumlah Kapasitans bagi Litar Sesiri

Formula kapasitor sesiri:

$$1/c_T = 1/c_1 + 1/c_2 + 1/c_3$$

Gantikan nilai:

$$\frac{1}{c_T} = \frac{1}{\boxed{}} + \frac{1}{\boxed{}} + \frac{1}{\boxed{}}$$

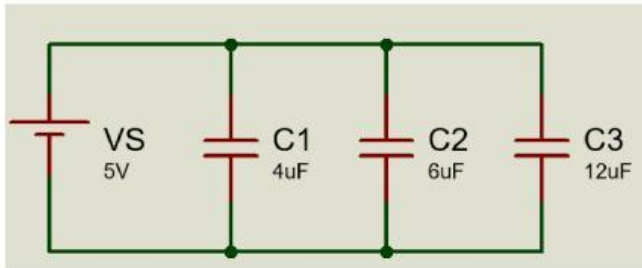
$$c_T = \frac{1}{\frac{1}{4\mu} + \frac{1}{6\mu} + \frac{1}{12\mu}}$$

$$c_T = \frac{\boxed{}}{\boxed{}}$$

$$c_T = \boxed{}$$

Jumlah kapasitans litar sesiri ialah:

$$C_T = \boxed{}$$



Jumlah Kapasitans bagi Litar Selari

(b) Jumlah Kapasitans bagi Litar Selari

Formula kapasitor selari:

$$C_T = C_1 + C_2 + C_3$$

Gantikan nilai:

$$C_T = \boxed{} + \boxed{} + \boxed{}$$

$$C_T = \boxed{} \text{ F}$$

Jumlah kapasitans litar selari ialah:

$$C_T = \boxed{} \text{ F}$$