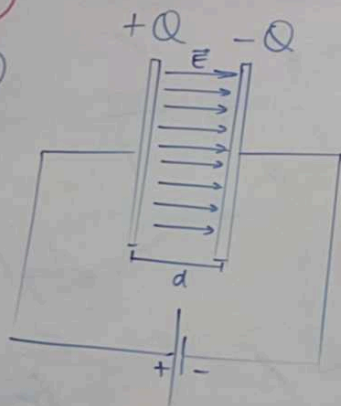


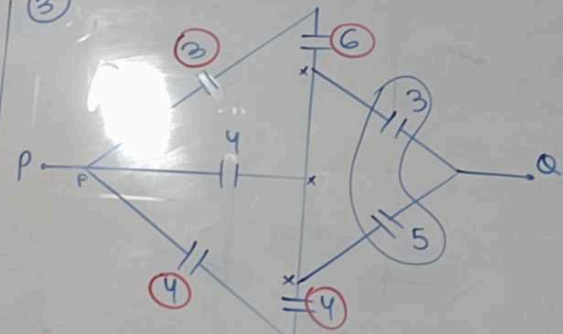
①

②

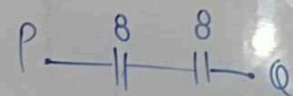


$$\frac{1}{3} + \frac{1}{6} = \frac{1}{2} \rightarrow \textcircled{2}$$

③

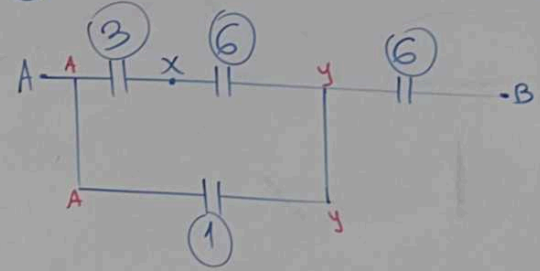


$$\frac{1}{4} + \frac{1}{4} = \frac{1}{2} \rightarrow \textcircled{2}$$



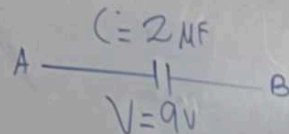
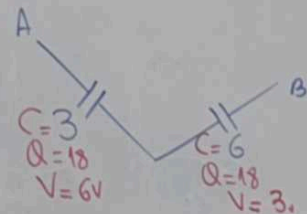
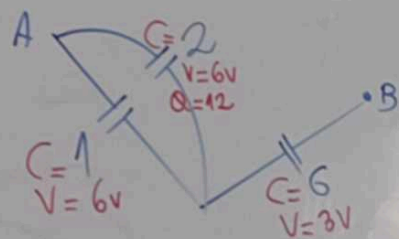
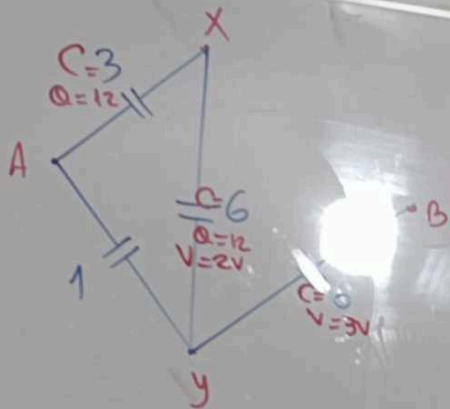
$$\frac{1}{8} + \frac{1}{8} = \frac{1}{4} \rightarrow \textcircled{4}$$

④



⑥

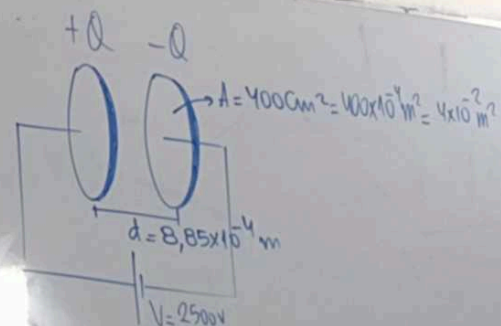
-B



$$Q = C \cdot V = 18 \mu C$$

$$\therefore V_{XB} = 2V + 3V = 5V$$

⑤

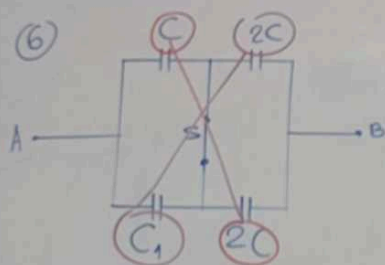


$$\checkmark d = 0,885 \text{ mm} = 0,885 \times 10^{-3} \text{ m} = 8,85 \times 10^{-4} \text{ m}$$

$$\checkmark C = \frac{\epsilon_0 \cdot A}{d}$$

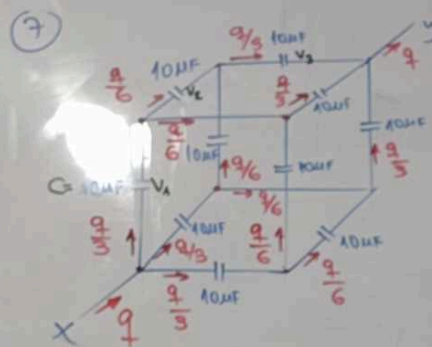
$$C = \frac{(8,85 \times 10^{-12}) (4 \times 10^{-2})}{8,85 \times 10^{-4}} = 4 \times 10^{-10} \text{ F}$$

$$\checkmark Q = C \cdot V = 4 \times 10^{-10} \times 2500 = 10^{-4} \times 10^{-10} = 10^{-6} \text{ C} = 1 \mu C$$



$$C_1(2C) = C(2C)$$

$$C_1 = C$$



$$V_1 + V_2 + V_3 = V_{xy}$$

$$\frac{\left(\frac{q}{3}\right)}{10} + \frac{\left(\frac{q}{6}\right)}{10} + \frac{\left(\frac{q}{3}\right)}{10} = \frac{q_{\text{TOTAL}}}{C_{\text{TOTAL}}}$$

$$\frac{q}{30} + \frac{q}{60} + \frac{q}{30} = \frac{q}{C_{xy}}$$

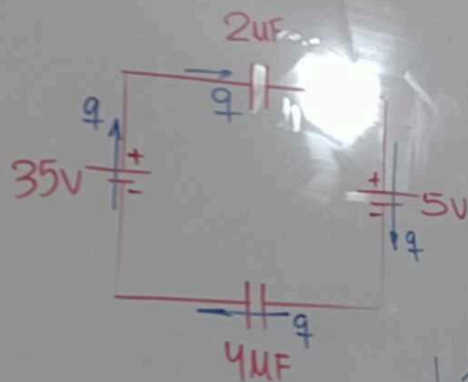
$$\frac{5}{60} = \frac{1}{C_{xy}}$$

$$C_{xy} = 12 \mu\text{F}$$

(8)

35V

(8)



$$\underbrace{\sum V}_{\text{BAT.}} = \underbrace{\sum \frac{Q}{C}}_{\text{CONDENS.}}$$

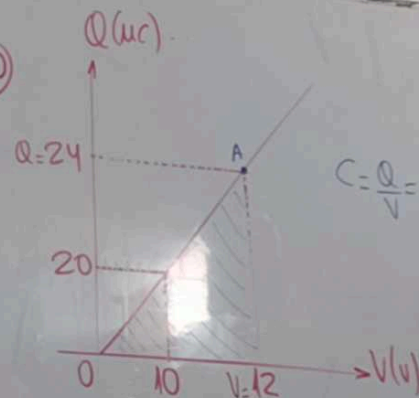
$$35 - 5 = \frac{q}{2} + \frac{q}{4}$$

$$30 = \frac{3q}{4}$$

$$q = 40 \mu\text{C}$$

Rpta. ✗

(10)



$$C = \frac{Q}{V} = \frac{24}{12} = 2 \mu\text{F} \quad \checkmark$$

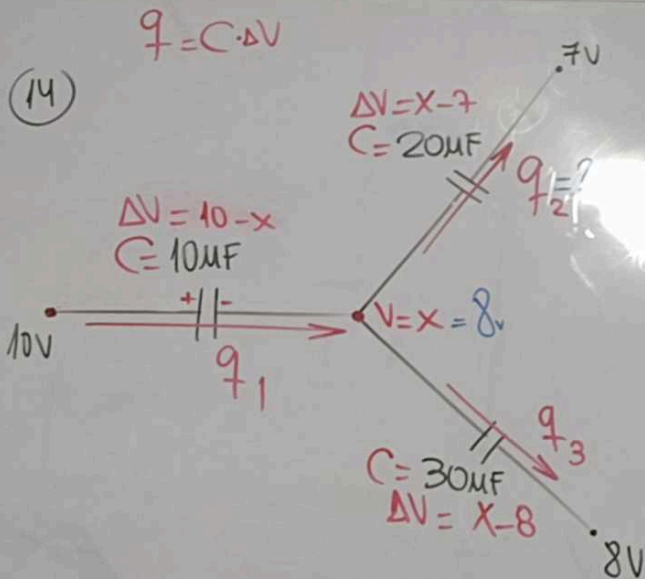
$$1) U = \frac{1}{2} C V^2$$

$$U_A = \frac{1}{2} (2) (12)^2 = 144 \mu\text{J} \quad \checkmark$$

$$U = \frac{b \times h}{2} = \frac{12 \times 24}{2}$$

$$U = 144 \mu\text{J} \quad \checkmark$$

5K + K =
5 5
2 2
No KATAK
II



$$q_1 = q_2 + q_3$$

$$(C \cdot \Delta V)_1 = (C \cdot \Delta V)_2 + (C \cdot \Delta V)_3$$

$$10(10 - x) = 20(x - 7) + 30(x - 8)$$

$$10 - x = 2x - 14 + 3x - 24$$

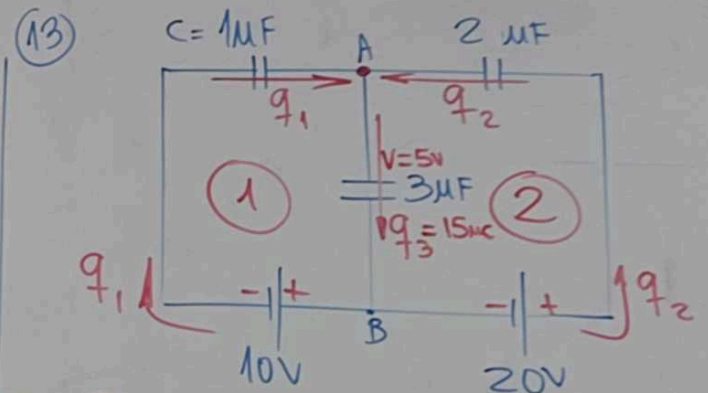
$$48 = 6x$$

$$(x = 8V)$$

$$q_2 = C \cdot \Delta V$$

$$= 20(8 - 7)$$

$$= 20 \mu C$$



$$1) q_1 + q_2 = q_3 \rightarrow (1)$$

$$2) \text{Malla (1)} \sum V = \sum \frac{q}{C}$$

$$-10 = \frac{q_1}{1} + \frac{q_3}{3} \rightarrow (2)$$

3) Malla ②

$$\sum V = \sum \frac{q}{C}$$

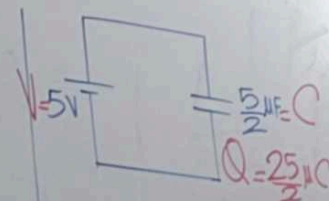
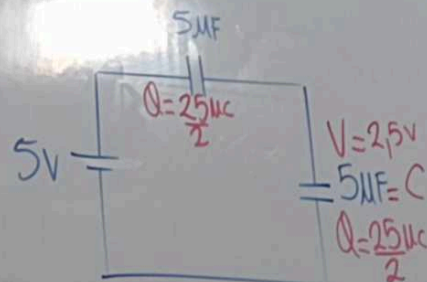
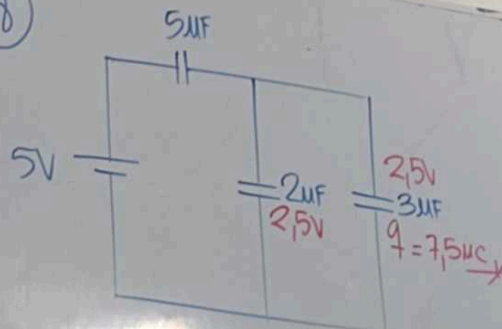
$$20 = \frac{q_2}{2} + \frac{q_3}{3} \rightarrow ③$$

$$+ \left\{ \begin{array}{l} 40 = q_2 + \frac{2q_3}{3} \\ -10 = q_1 + \frac{q_3}{3} \end{array} \right.$$

$$30 = q_3 + q_3$$

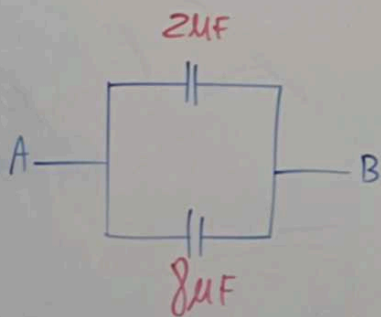
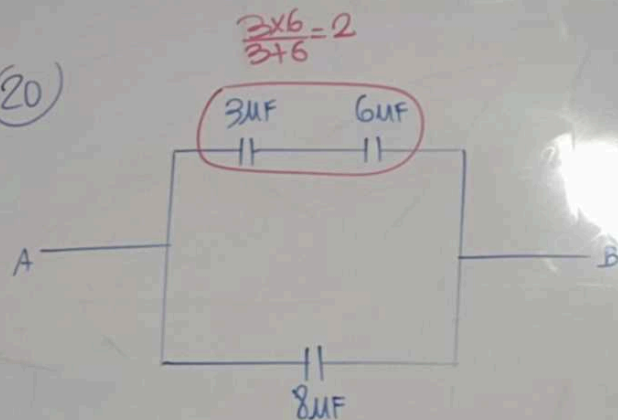
$$q_3 = 15 \mu C$$

(18)

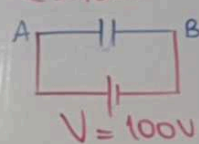


$$V = \frac{Q}{C} = 2.5V$$

(20)



$$C = 10 \mu\text{F}$$



$$U = \frac{1}{2} C \cdot V^2$$

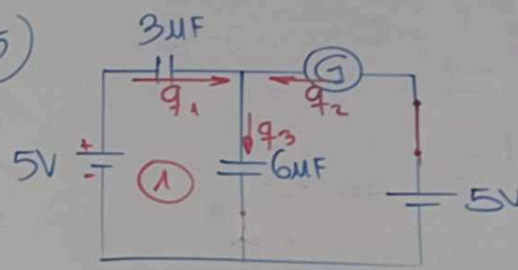
$$U = \frac{1}{2} (10) (100)^2$$

$$U = 5 \times 10^4 \mu\text{J}$$

$$U = 5 \times 10 \times 10^{-6} \text{ J}$$

$$U = 5 \times 10^{-2} \text{ J}$$

(15)



$$q_1 + q_2 = q_3$$

$$\sum V = \sum \frac{q}{C}$$

$$5 = \frac{q_1}{3} + \frac{q_3}{6}$$

$$\sum V = \sum \frac{q}{C}$$

$$5 = \frac{q_3}{6} \rightarrow q_3 = 30 \mu\text{C}$$

$$q_2 = 30 \mu\text{C}$$