

**3ª  
SÉRIE**

## **CANAL SEDUC-PI3**



PROFESSOR (A):

**FRANKLIN  
RINALDO**



DISCIPLINA:

**FÍSICA**



CONTEÚDO:

**ASSOCIAÇÃO  
DE RESISTORES**



TEMA GERADOR:

**SAÚDE NA  
ESCOLA**



DATA:

**10.06.2019**

P/CASA

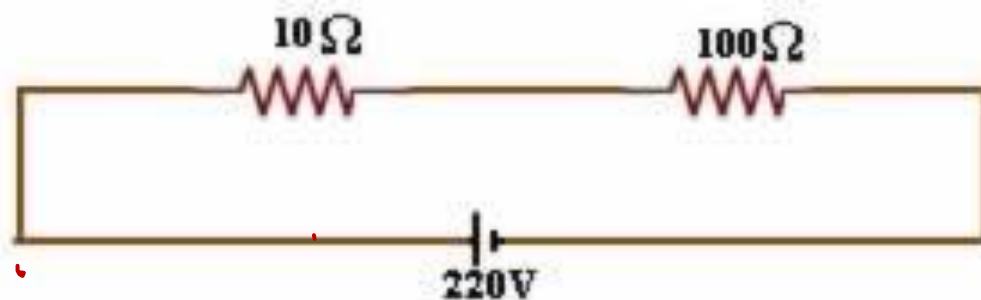
05. A diferença de potencial entre os extremos de uma associação em série de dois resistores de resistências  $10\Omega$  e  $100\Omega$  é  $220V$ . Qual é a diferença de potencial entre os extremos do resistor de  ~~$10\Omega$~~   $100\Omega$ .

CALCULAR  $i$

$$U = R \cdot i$$

$$220 = (10 + 100) i$$

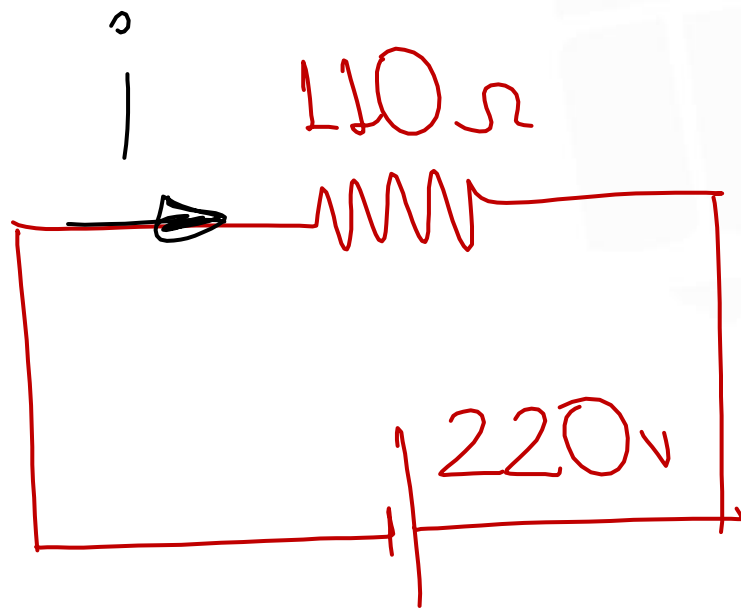
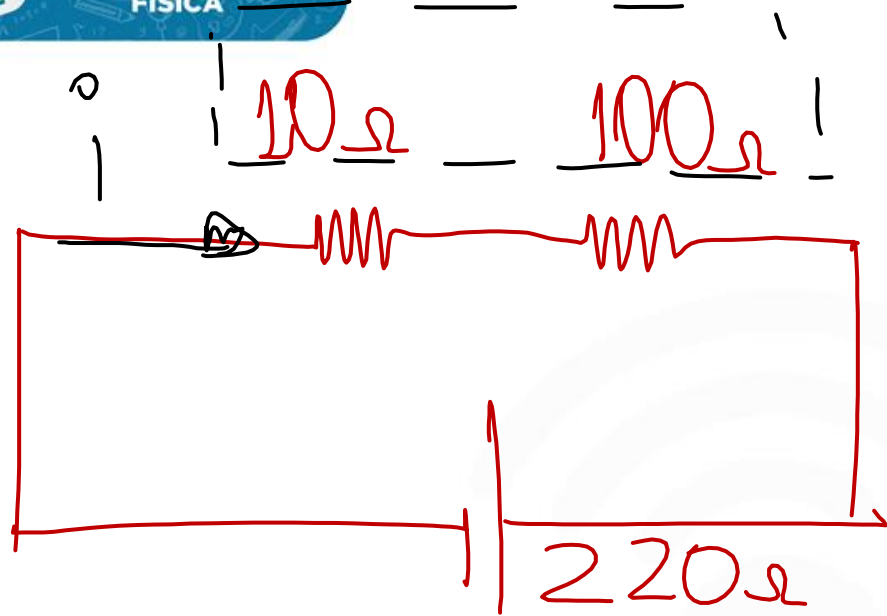
$$220 = 110 i \Rightarrow i = \frac{220}{110} = 2A$$



$$U = R \cdot i$$

$$U = 100 \cdot 2$$

$$U = 200V$$



$$V = R \cdot i$$

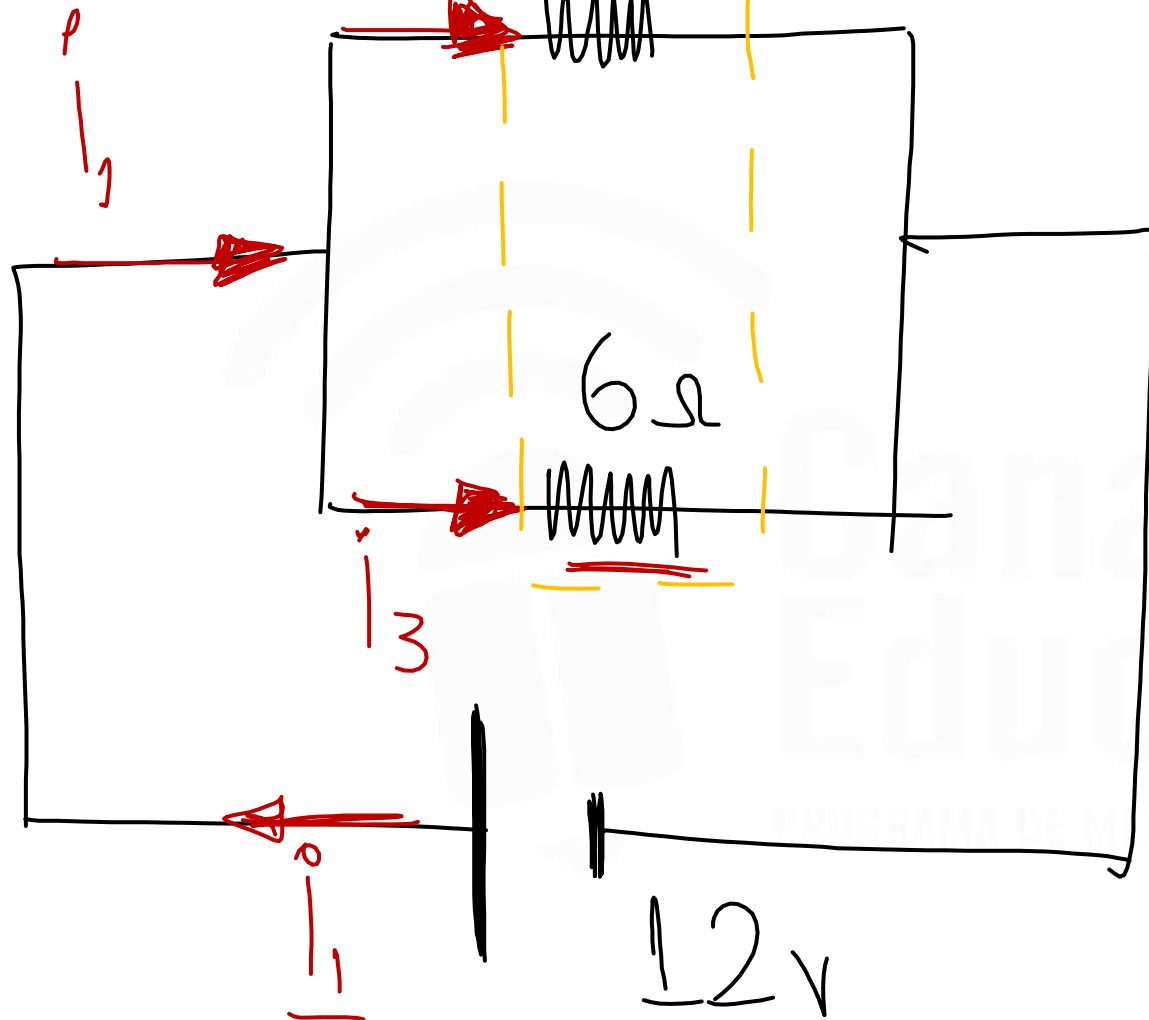
$$220 = 110 \cdot i \Rightarrow i = 2A$$

$$V = R \cdot i$$

$$V = 10 \cdot 2$$

$$V = 20V$$

$E_{x_2}$



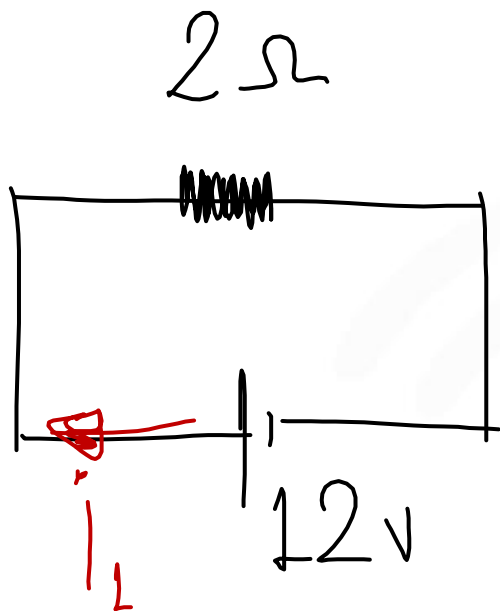
DETERMINE O VALOR DAS CORRENTES

$i_1, i_2 \text{ e } i_3$

\* CALCULAR  $R_{eq}$

$$R_{eq} = \frac{3 \cdot 6}{3 + 6} = \frac{18}{9}$$

$$R_{eq} = 2\Omega$$



$$\begin{aligned}
 -V &= R \cdot i_1 \\
 12 &= 2 \cdot i_1 \Rightarrow i_1 = \frac{12}{2} \\
 &\boxed{i_1 = 6A}
 \end{aligned}$$

$$\begin{aligned}
 V &= R \cdot i_2 \\
 12 &= 3 \cdot i_2 \\
 i_2 &= \frac{12}{3} \Rightarrow \boxed{i_2 = 4A}
 \end{aligned}$$


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$$\begin{aligned}
 \cancel{V} &= R \cdot i_3 \\
 12 &= 6 \cdot i_3 \\
 i_3 &= \frac{12}{6} \Rightarrow \boxed{i_3 = 2A}
 \end{aligned}$$