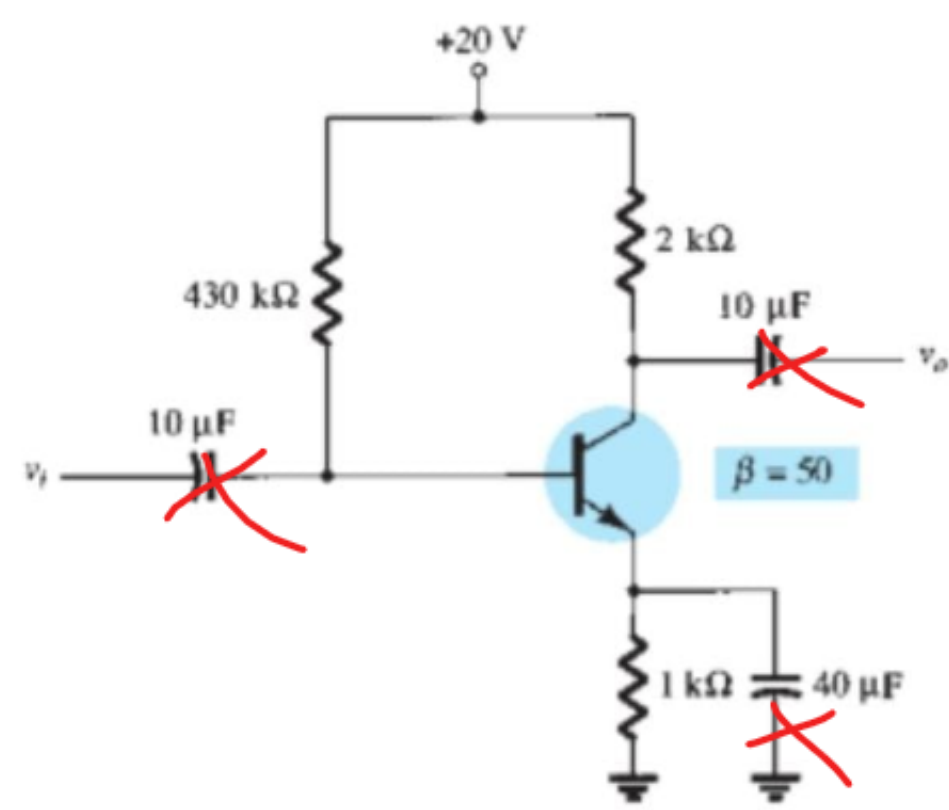


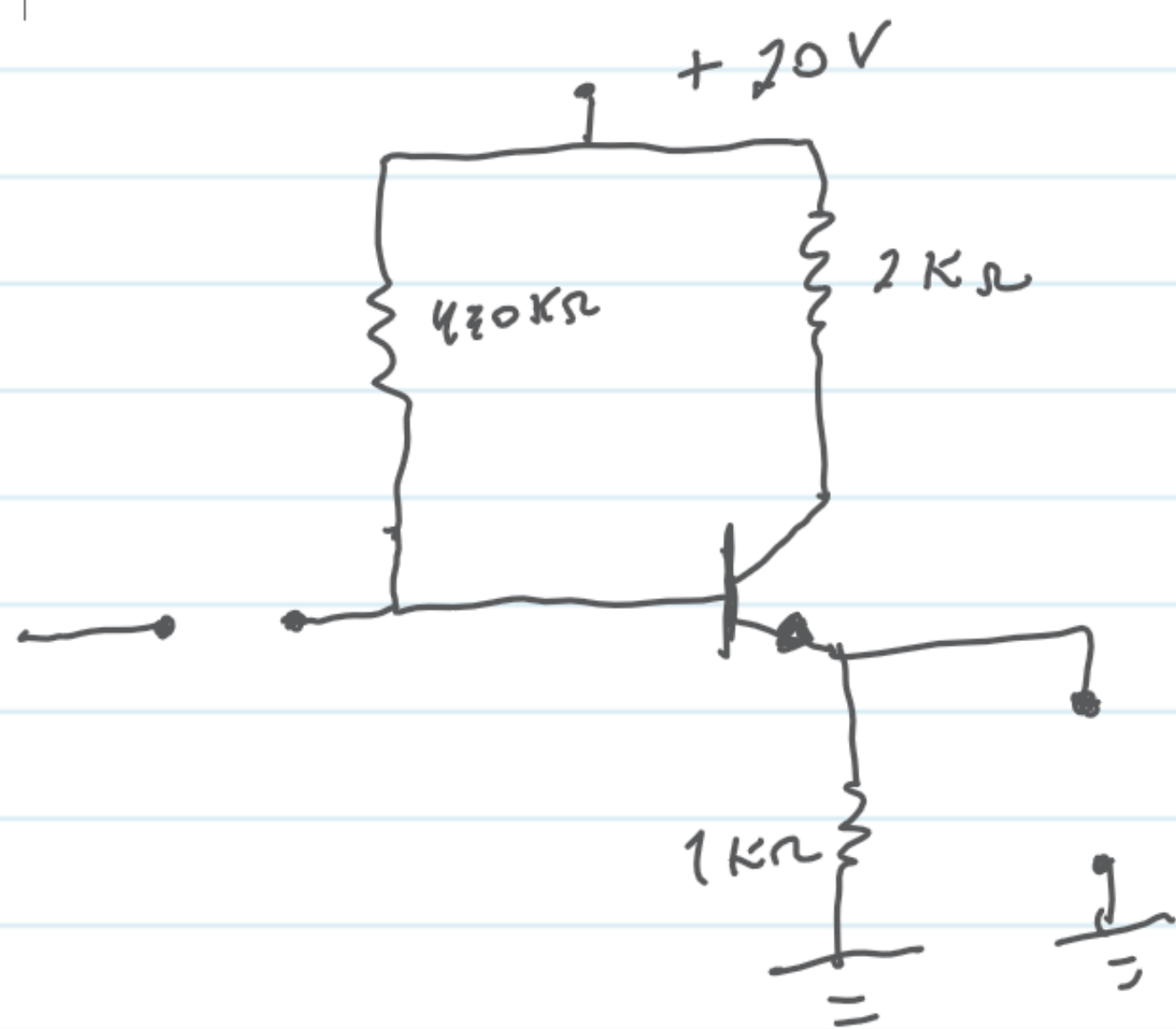
TBJ - Exemplo - polarização do emissor



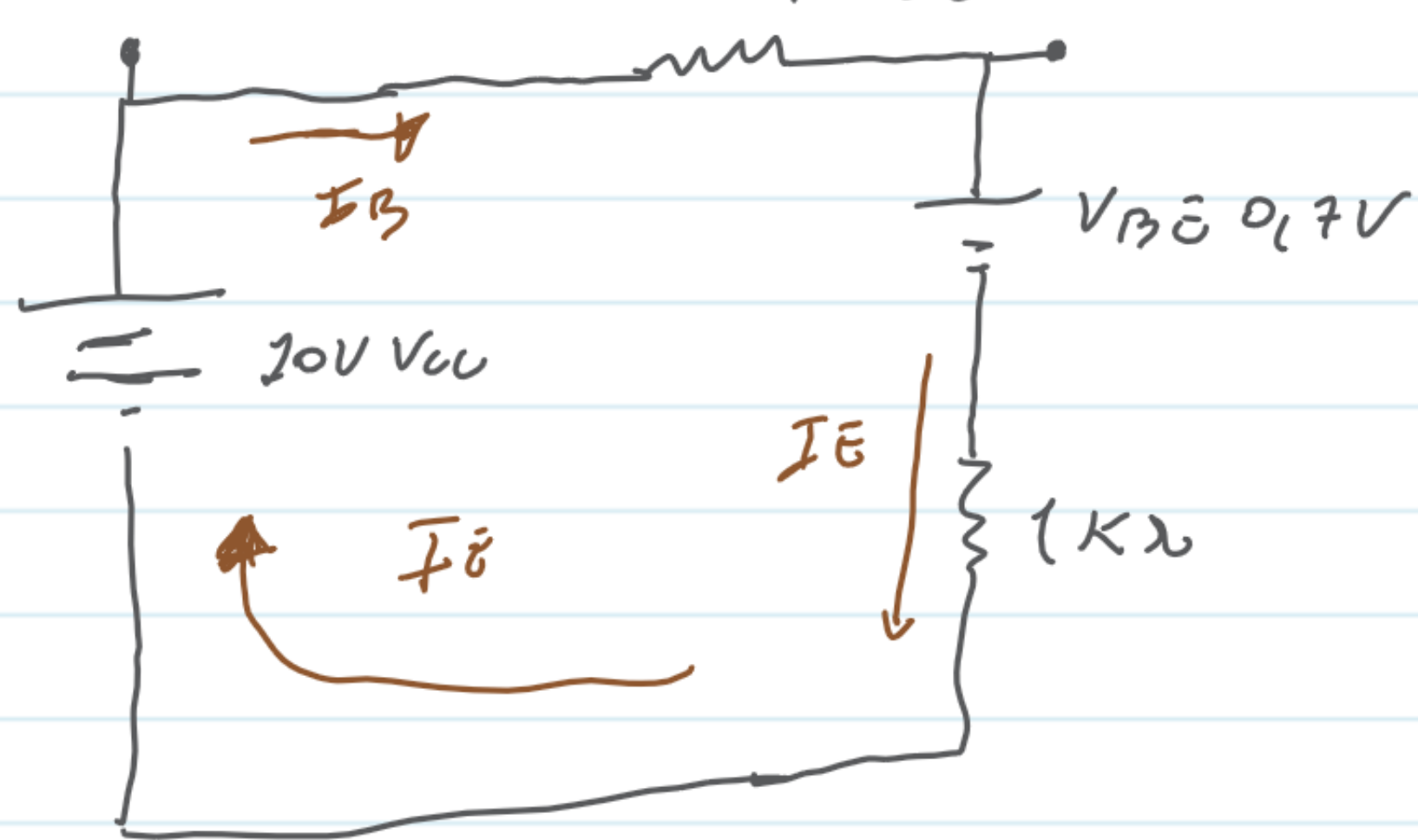
Determine os valores de I_B , I_C , V_{CE} , V_{CB} , V_{RE} e V_{BT} .

* CC O COBOCATOR JOMI ARZERA!

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REDUÇÃO → 430kΩ



R₂

$$I_C = \beta \cdot I_B$$

$$I_C = 40,12 \mu A \cdot 50$$

$$I_C = 2,006 mA$$

$$V_{CC} - R_C I_C - V_{CE} - R_E I_E = 0$$

$$20 - 2 \cdot 2,006 - V_{CE} - 1 \cdot (2,006 + 0,04012) = 0$$

$$20 - 2 \cdot 2,006 - V_{CE} - 1 \cdot (2,006 + 0,04012) = 0$$

$$20 - 4,012 - V_{CE} - 2,04612 = 0$$

$$V_{CE} = 20 - 4,012 - 2,04612 = 13,9418 V$$

$$V_{CE} = 13,95 V$$

$$V_{CB} = V_{CE} - 0,7 = 13,25 V$$

$$V_{RE} = 1 \cdot 2,04612 = 2,04612 V$$

$$V_{BT} = I_B \cdot R_B = 40,12 \mu A \cdot 430 k\Omega = 17,25 mV$$

$$I_B = ??$$

$$V_{CC} - R_B I_B - V_{BE} - R_E I_E = 0$$

$$20 - 430 \cdot I_B - 0,7 - 1 \cdot I_E = 0$$

$$19,3 = 430 I_B + I_E$$

$$19,3 = 430 I_B + (I_B + I_C)$$

$$19,3 = 430 I_B + (I_B + (\beta I_B))$$

I_B em evidência.

$$19,3 = I_B (430 + (1 + \beta))$$

$$I_B = \frac{19,3}{430 + (1 + 50)}$$

$$I_B = \frac{19,3}{430 + (1 + 50)}$$

[Resistência efetiva]

$$I_E = I_B + I_C$$

$$I_C = ??$$

$$I_C = \beta \cdot I_B$$

$$\beta = 50$$

$$I_B = 40,12 \mu A$$