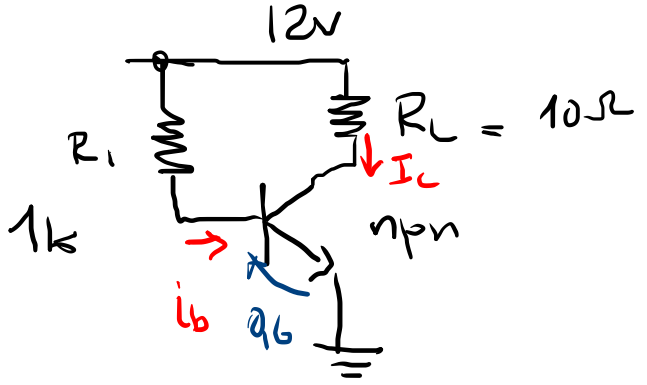

$12 = R_1 \cdot I_b + 0{,}6$

$R_1 \cdot I_b = 12 - 0{,}6$

$I_b = \frac{12 - 0{,}6}{R_1} = \frac{11{,}4}{1k} = 0{,}011\ A \cong 10\ mA$

2n2222 .. $\beta \cong 100$

$I_c = \beta \cdot I_b \rightarrow I_c = 10\ mA \cdot 100 = 1000\ mA \cong \underline{1\ A}$

$10 < 100\ mA$

$\underline{I_c = 1A}$ $\underline{R_L = 10\Omega}$ $V = IR = 1A \cdot 10\Omega = 10V$

$\downarrow$

$\beta < 100 \rightarrow I_b = \frac{I_c}{\beta} = \frac{1000\ mA}{100} = \underline{10\ mA}$

$12 = I_b \cdot R_1 + 0{,}6 \rightarrow R_1 < \frac{12 - 0{,}6}{16} = \frac{11{,}4}{0{,}010} = 1140\Omega \cong 1k$