Transistor pt2
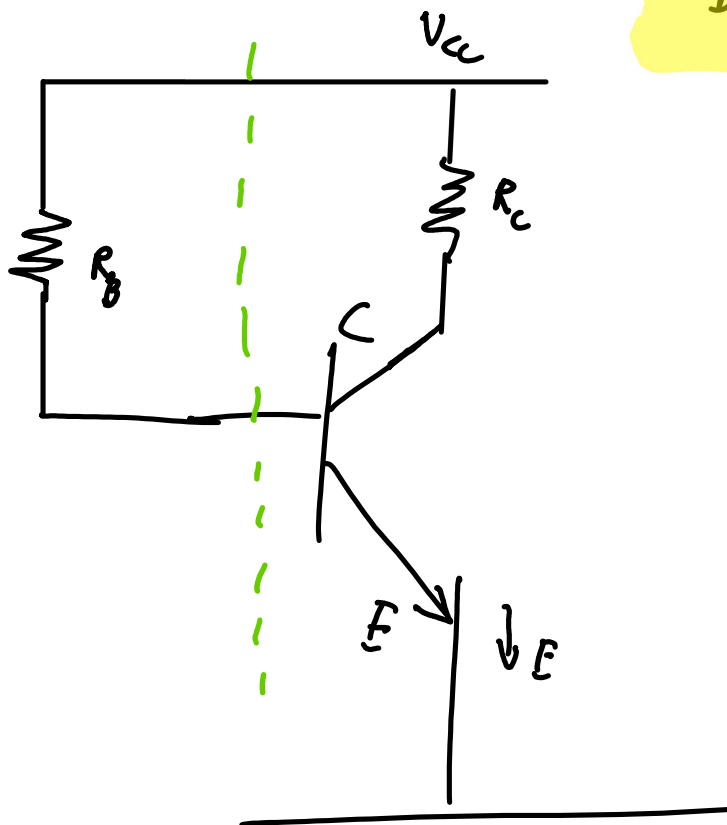
Tuesday, December 3, 2024   11:57 AM

$$I_B = \frac{I_c}{h_{Fe}}$$

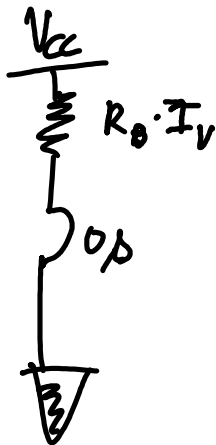$$V_{cc} = 10\,V$$

$$h_{Fe} = 50$$

$$R_B = 5{,}2\ K\,\Omega$$

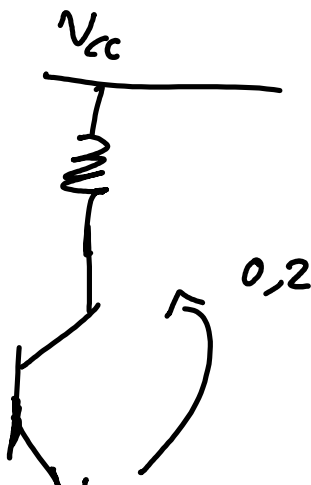$$R_c = 0{,}53\ K\,\Omega$$

$$V_{CE} = 0{,}2\,V \;\big|\; V_{BE} = 0{,}8\,V$$
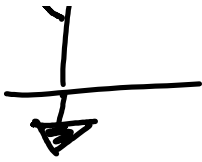

$$V_{cc} = R_B \cdot I_D + 0{,}8$$

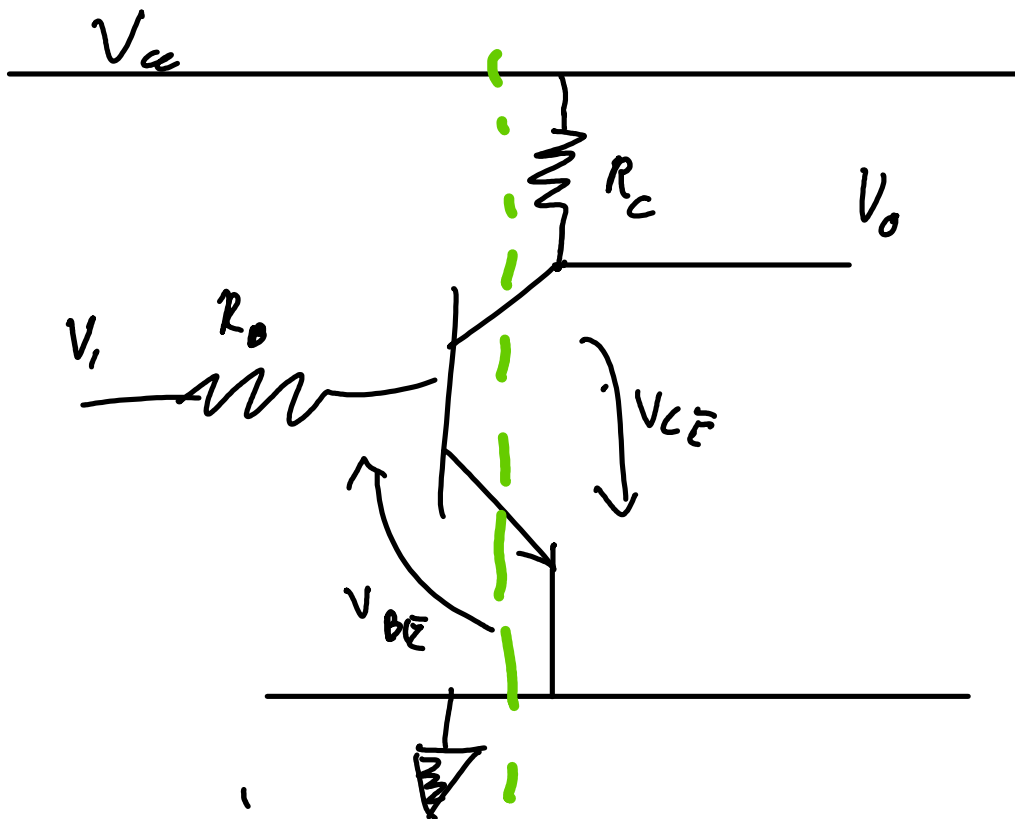$$I_B = \frac{10 - 0{,}8}{5{,}2\,K} = 1{,}77\ mA$$

$$V_{cc} = R_c \cdot I_c + 0{,}2$$

$$I_{\ell} = \frac{V_{cc} - 0{,}2}{R_c} = 21{,}7\ mA$$

$$1,77 > \frac{29,7}{50}$$

$$1,77 > 0,6 \quad \checkmark$$

$V_{CC} =$

$h_{FB} = \beta$

$R_B = 1$

$R_C = 1$

$V_{CE} = 0,$

$V_{BE} = 0,$

se $V_1 = 6V \Rightarrow$ Saturo
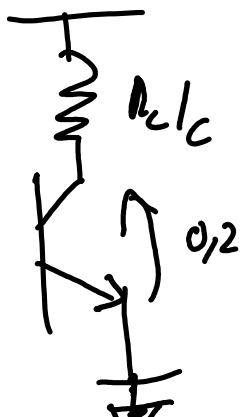
$$V_{CC} = R_C I_C + 0,2$$

$$I_C = \frac{11,8}{1K} = 11,8 \; mA$$

$$I_0 > \frac{I_c}{\beta}$$

$$0,52 > 0,118 \quad \checkmark$$

SATURA