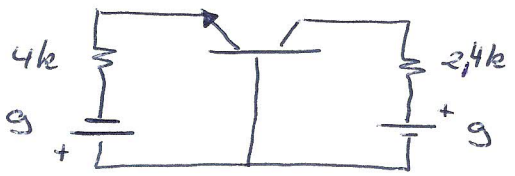
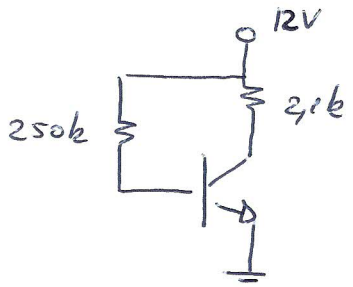
LISTA DE EXERCÍCIOS

TBJ - 01

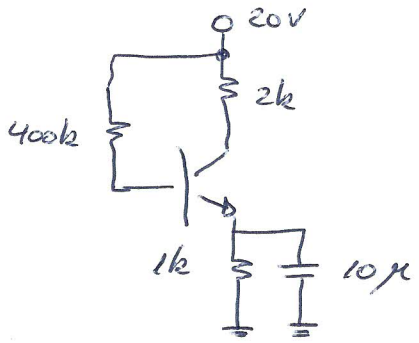
1) Determine: V_{BE}, V_{CB}, I_E e I_C para $\alpha = 0,99$



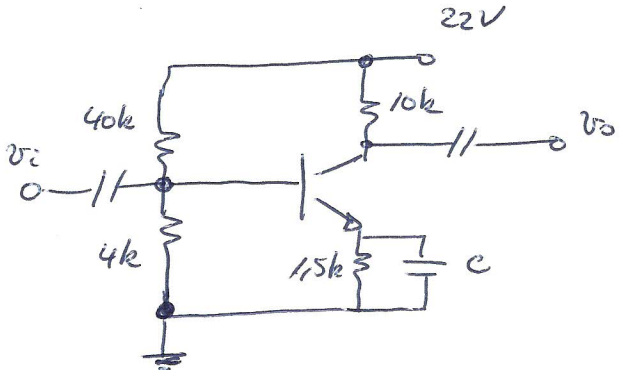
2) Determine: V_{CE}, I_B, I_C e I_E para $\beta = 50$



3) Determine: V_{CE}, I_B, I_C e I_E para $\beta = 100$

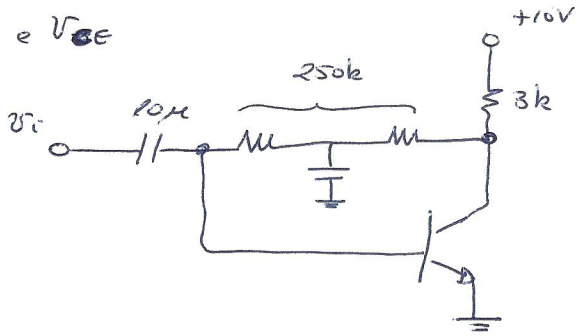


4) Determine: V_{CE}, I_B, I_E, I_C e V_E para $\beta = 140$



5) Determine I_E, I_B, I_C e V_{CE}

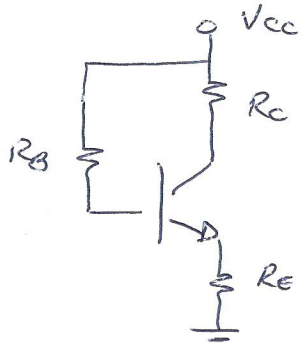
para $\beta = 50$



6) Determine R_B, R_C e R_E

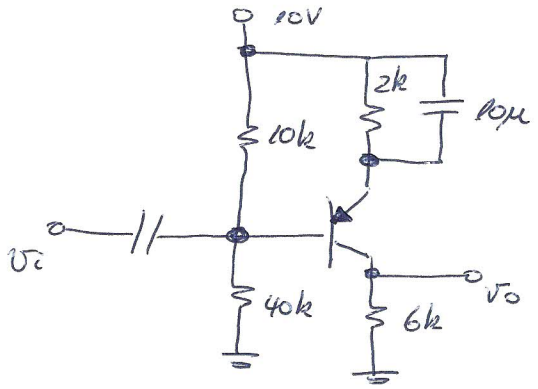
para $\beta = 90$, $I_{CQ} = 5mA$,

$V_{CEQ} = \frac{1}{10} V_{CC}$, $V_{CC} = 20V$



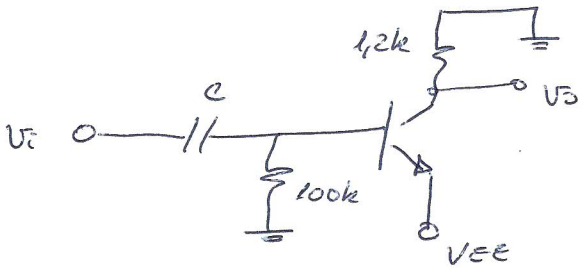
7) Determine I_B, I_C, I_E, V_{EC}

para $\beta = 180$



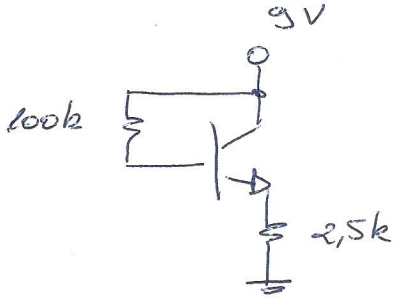
8) Determine I_C, I_B, I_E, V_{CE}

para $V_{EE} = -9$ e $\beta = 45$



9) Determine I_E, I_C, I_B e V_{CE}

para $\beta = 45$



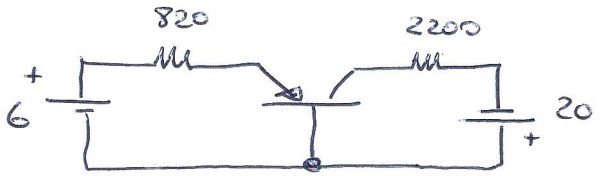
Para os exercícios a seguir utilize:

$\alpha = 0,99$

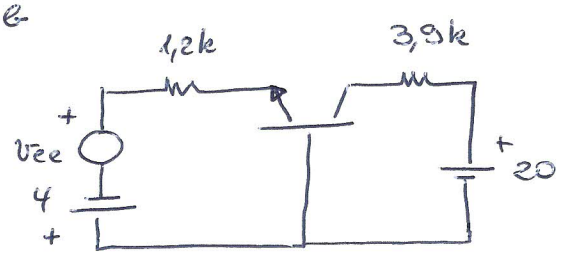
$I_{CBO} = 10^{-8} A$

$|V_{BEQ}| = 0,6 V$

10) Calcule I_{CQ}, V_{CBQ}, I_{EQ}



11) Determine: I_{CQ}, V_{CBQ}, V_{CE} para $V_{ee} = 3 \operatorname{sen} \omega t$



12) Repete o exercício anterior com $V_{ee} = 0,3 \operatorname{sen} \omega t$. Você notou algo estranho no exercício anterior? Explique.

13) Calcule I_{BQ}, I_{CQ}, V_{CEQ} e V_{ce}. Repita o exercício para $V_{BB} = 0,2 \operatorname{sen} \omega t$. O que os exercícios 11 e 13a têm em comum?