## Special Problem 5.5-2

Determine the values of resistors $R_{1}, R_{2}, R_{C}, R_{E}$ so that:
a) the $D C$ collector current is 1.0 mA .
b) the $D C$ emitter voltage is $V_{E}=2.3 \mathrm{~V}$.
c) current $I_{1}=0.5 I_{C}$.
d) the small-signal output shown on the next page is as large as possible (i.e., the value $a$ is as large as possible) without distortion.

Hint: This is a DC bias problem, no small-signal analysis is required.


Look on next page to see output signal!!

Note this is the small-signal ouput signal.


