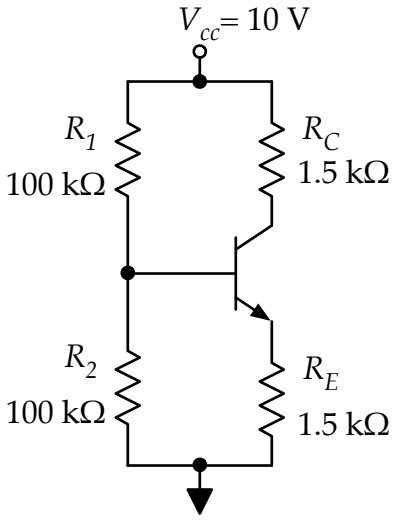
EE 230 — HW 5.2 Name_____



1. For the BJT circuit at right, calculate i_C, i_B, i_E, and v_{CE}, using the following methods:
   a. exactly, using the exponential equations for the BJT,
   b. Using the usual approximation, which says that $v_{BE} \approx 0.7$ when the transistor is on, and
   c. using a DC bias-point simulation with PSPICE.

   For the transistor, $\beta_F = 150$ and $I_{SN} = 5\text{x}10^{-14}$ A.

   Put your answers in the table below. Attach a copy of your PSPICE circuit diagram with DC values printed on it (one sheet only).

	i_C	i_B	i_E	v_{CE}
exact				
approximate				
PSPICE				