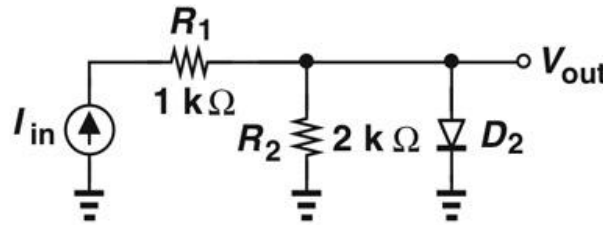|	
Date assigned:	9/10/2012
Date due:	9/17/2012

Problem 2.1

Beginning with $V_{D,on}$=800 mV for each diode, determine the change in V_{out} if I_{in} changes from 3mA to 3.1mA for the circuits shown below.
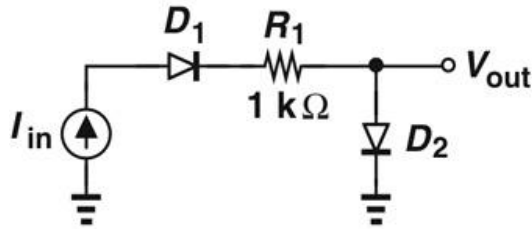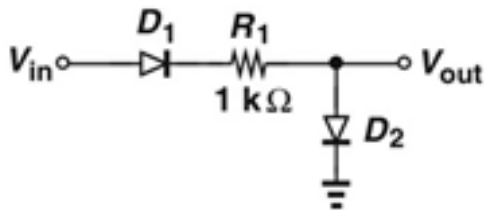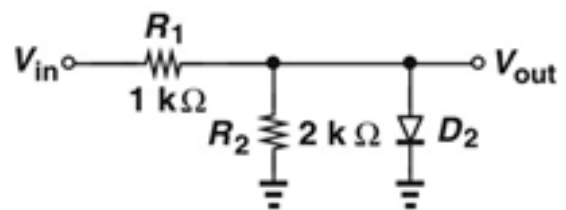

(a)   (b)

Problem 2.2

Plot the input/output characteristics of the circuits below. Assume a constant-voltage model. Assume R1=1K and R2=2K and VB=2V.

(a)   (b)
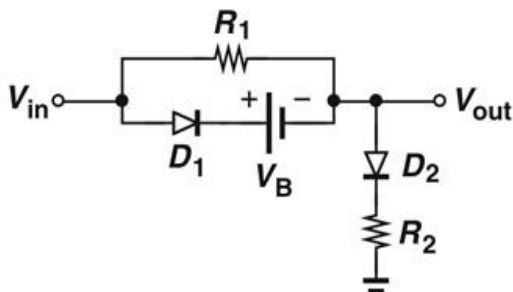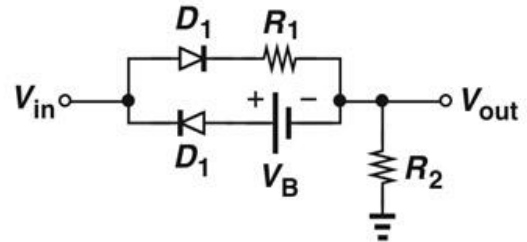

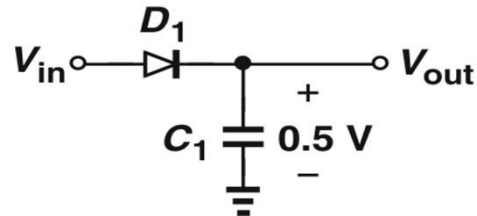(c)   (d)

Problem 2.3

Assuming $V_{in} = V_p \sin wt$, plot the output waveform of the circuit shown below for an initial condition of 0.5V across C_1. You can assume $V_p = 5V$.

Problem 2.4 Pspice Simulation Assignment

Problem 3.52 in Fundamentals of Microelectronics by Razavi