

Please remember that homeworks are due at 12:00 noon Friday March 10, 2006. Please put your homework in the appropriate box (EE42 or EE100) in 240 Cory Hall. Print your name(s) in upper right corner of your paper and indicate whether you're enrolled in EE42 or EE100.

1. (*Reading Assignment from Hambley, 3rd Edition*)
Chapter 11. 1,2,3,9,10
Chapter 14. 1,2,3,4
2. Hambley, 3rd Edition: From Chapter 11: P11.2, P11.6, P11.12
3. Hambley, 3rd Edition: From Chapter 14: P 14.8, P14.9, P14.10, P14.17, P14.18
4. In Figure 1, let $V_1 = 2\text{ V}$, $r_\pi = 2500\ \Omega$, $R_L = 5\text{ k}\Omega$, and $\beta = 100$. Find i_1 .
5. Find the Thevenin resistance of the subcircuit show in Figure 1, using the alternative method in which *independent* sources are set to zero. (Use a test voltage at terminals A, B and find I_{TEST} .)
6. Find the Thevenin equivalent of the subcircuit show in Figure 2. The factor r_m is a constant.

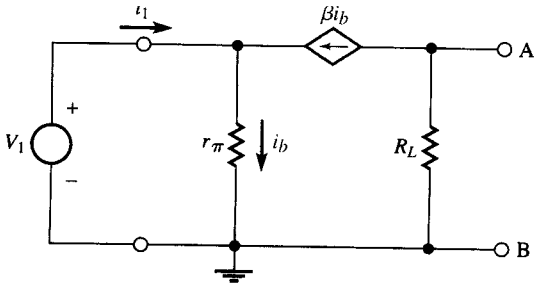


FIGURE 1

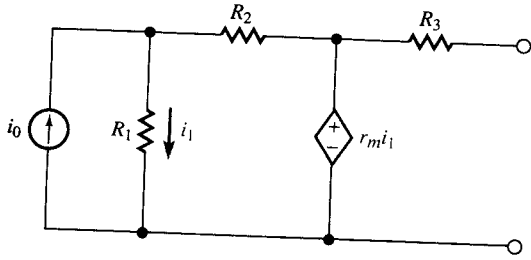


FIGURE 2