

## EE331 Spring 2009

### PS3: Assigned W (1/14)

#### Problems

- 2.31 (the  $1\Omega$ ,  $2\Omega$ , and  $4\Omega$  resistors are all in parallel)  
*Ans:*  $i_1 = 11.2\text{A}$ ,  $i_2 = 1.6\text{A}$ ,  $i_3 = 9.6\text{A}$ ,  $i_4 = 6.4\text{A}$ ,  $i_5 = 3.2\text{A}$
- 2.34 (overall dissipated power can be solved using the equivalent resistance)  
*Ans:*  $R_{eq} = 40\Omega$ ,  $P = 3.6\text{W}$
- 2.36 (maintain your intermediate resistor combination steps to help you get the output voltage using voltage dividers)  
*Ans:*  $i = 0.5\text{A}$ ,  $V_o = 1.5\text{V}$
- 2.39  
*Ans:* a)  $727.2\Omega$ ; b)  $3000\Omega$