1) Simpson P50, problem 32.

2) This is a review problem on complex numbers. Manipulating complex numbers will become important when we discuss AC circuits.
   Let: $A = 2 + 4j$
   $B = -1 + 3j$
   $C = 3 - 2j$
   Find the magnitude and phase of:
   a) $A$, $B$, and $C$
   b) $(A + C)/B$
   c) $(2A - 3B^*)/(A - C^*)$, $^* =$ complex conjugate

3) A current of 1 mA charges a 1 $\mu$F capacitor. How long does it take the cap. to reach 10 V?

4) Simpson P103, problem 2. Also calculate $V_{RMS}$ for the following waveforms:

8) Simpson P105, problem 15. The rise time is defined on page 107 of Simpson.

Additional problems (10 points each):
1) Draw the Thevenin equivalent circuit for the following two circuits:
   (note: the load resistor has already been taken out of the circuit, if it were in the circuit, it would be across the $V_{out}$ terminals).

2) Simpson P105, problem 23.