1. Convert the following numbers to 10’s complement. Use as many digits as are necessary to represent the number.
   (a) 645
   (b) −26
   (c) −3452

2. Convert the following numbers to binary, and then give their 2’s complement representation.
   (a) 43
   (b) -5
   (c) -21

3. Evaluate the following expressions using 2’s complement, where A and B are the following (positive) binary numbers: $A = 11111110$ and $B = 00000010$.
   (a) $A + B$
   (b) $-B$
   (c) $A − B$
   (d) $B − A$

4. How many bits would be needed to represent a character set which contains 51 characters? How about a character set with 293 characters?

5. Exercises 55 and 56 from Chapter 4 (on page 115).


7. Extra Credit: Draw a circuit which adds two three-bit binary numbers. (Hint: Use the adders and half adders described in the text.)