1. For the binary number 1000, the weight of the column with the 1 is

- a. 4
- b. 6
- c. 8
- d. 10

- 2. The 2's complement of 1000 is
 - a. 0111
 - b. 1000
 - c. 1001
 - d. 1010

- 3. The fractional binary number 0.11 has a decimal value of
 - a. ½
 - b. ½
 - c. $\frac{3}{4}$
 - d. none of the above

- 4. The hexadecimal number 2C has a decimal equivalent value of
 - a. 14
 - b. 44
 - c. 64
 - d. none of the above

- 5. Assume that a floating point number is represented in binary. If the sign bit is 1, the
 - a. number is negative
 - b. number is positive
 - c. exponent is negative
 - d. exponent is positive

- 6. When two positive signed numbers are added, the result may be larger that the size of the original numbers, creating overflow. This condition is indicated by
 - a. a change in the sign bit
 - b. a carry out of the sign position
 - c. a zero result
 - d. smoke

- 7. The number 1010 in BCD is
 - a. equal to decimal eight
 - b. equal to decimal ten
 - c. equal to decimal twelve
 - d. invalid

- 8. An example of an unweighted code is
 - a. binary
 - b. decimal
 - c. BCD
 - d. Gray code

- 9. An example of an alphanumeric code is
 - a. hexadecimal
 - b. ASCII
 - c. BCD
 - d. CRC

10. Identify the logic functions being performed in the following diagrams.

