

**Knowledge**

1. Give the address "101010101" in gray the values of the following:

- a. A one's complement value for the address's complement
- b. The hexadecimal value for the address
- c. The address's binary value
- d. The address's binary complement value
- e. The address's binary value
- f. The address's decimal value
- g. The address's decimal complement value
- h. The address's decimal value

2. How do you determine the IP address class by changing the octet into binary?

- a. Convert the octet into binary and then determine the number of 1's
- b. The number of 1's in the octet determines the class
- c. The number of 0's in the octet determines the class
- d. The number of 1's in the octet determines the class
- e. The number of 0's in the octet determines the class

3. Write the decimal values of the following algorithms:

Algorithm 1	Algorithm 2	Algorithm 3
101010101	101010101	101010101
101010101	101010101	101010101
101010101	101010101	101010101
101010101	101010101	101010101

4. Complete the following table:

Algorithm	Algorithm	Value	Value
101010101	101010101	101010101	101010101
101010101	101010101	101010101	101010101
101010101	101010101	101010101	101010101
101010101	101010101	101010101	101010101
101010101	101010101	101010101	101010101
101010101	101010101	101010101	101010101
101010101	101010101	101010101	101010101

5. Write the opposite of some numbers using a correct sign:

- 101010101
- 101010101
- 101010101
- 101010101
- 101010101