Homework Assignment 4

Logical Shift Right

No work needed.

1. 0110 by 3
2. 1110 by 1
3. 001011 by 7
4. 111111 by 4
5. 01111111 by 2
6. 10000000 by 6
7. 000000000101 by 1
8. 111111111111 by 9
9. 101010 by 0
10. 0101 by 3

Arithmetic Shift Right

No work needed.

1. 0110 by 3
2. 1110 by 1
3. 001011 by 7
4. 111111 by 4
5. 01111111 by 2
6. 10000000 by 6
7. 000000000101 by 1
8. 111111111111 by 9
9. 101010 by 0
10. 0101 by 3

Logical Shift Left

No work needed.

1. 0110 by 3
2. 1110 by 1
3. 001011 by 7
4. 111111 by 4
5. 01111111 by 2
6. 10000000 by 6
7. 000000000101 by 1
8. 111111111111 by 9
9. 101010 by 0
10. 0101 by 3

Arithmetic Shift Left

No work needed.

1. 0110 by 3
2. 1110 by 1
3. 001011 by 7
4. 111111 by 4
5. 01111111 by 2
6. 10000000 by 6
7. 000000000101 by 1
8. 111111111111 by 9
9. 101010 by 0
10. 0101 by 3

AND, OR, XOR Functions

What would be the results of AND, OR, and XOR. Treat each bit of the following binary numbers as individual inputs to each gate. No work needed.

Example: 1001001 => AND = 0, OR = 1, XOR = 1

1. 0110
2. 1110
3. 001011
4. 111111
5. 01111111
6. 10000000
7. 000000000101
8. 111111111111
9. 101010
10. 0101