Homework Assignment 8

Arithmetic Shift Right

1. $01010_2 >> 2$ =>
2. $1001_2 >> 1$ =>
3. $234_8 >> 2$ =>
4. $5611_8 >> 1$ =>
5. $44225_8 >> 3$ =>
6. $3746_8 >> 1$ =>
7. $646FAB_{16} >> 2$ =>
8. $A17_{16} >> 1$ =>
9. $12EDC_{16} >> 2$ =>
10. $8BA77_{16} >> 3$ =>

Logical Shift Left

1. $01010_2 << 2$ =>
2. $1001_2 << 1$ =>
3. $234_8 << 2$ =>
4. $5611_8 << 1$ =>
5. $44225_8 << 3$ =>
6. $3746_8 << 1$ =>
7. $646FAB_{16} << 2$ =>
8. $A17_{16} << 1$ =>
9. $12EDC_{16} << 2$ =>
10. $8BA77_{16} << 3$ =>

To Binary

Convert following numbers to binary

1. 234_8 =>
2. 5611_8 =>
3. 44225_8 =>
4. 3746_8 =>
5. $646FAB_{16}$ =>
6. $A17_{16}$ =>
7. $12EDC_{16}$ =>
8. $8BA77_{16}$ =>

From Binary

Convert following binary numbers to octal or hexadecimal

1. 101 101 to octal
2. 010 101 to octal
3. 1 001 001 to octal
4. 00 110 to octal
5. 1101 0001 1010 0000 0110 to hexadecimal
6. 0100 0101 1001 0001 to hexadecimal
7. 1 1010 1111 1010 1101 to hexadecimal
8. 00 0010 0100 0110 1000 to hexadecimal

Multiplication

For each question, show the entire table for the solution. The answers are already provided.

1. $01000 \times 1000 = 1111000000$
2. $1001001 \times 11011 = 00000100010011$
3. $01110101 \times 010011 = 0000100010101111$

Division

For each question, show the entire table for the solution. The answers are already provided.

1. $11000 \div 1010 = 111000001$
2. $1001001 \div 011011 = 1111111111110$
3. $01110101 \div 10011 = 0000011110111$