Exercise 1

1. What is the decimal representation of each of the following unsigned binary integers?

a. 00110101
b. 10010110
c. 11001100

2. What is the sum of each pair of binary integers?

a. 10101111 + 11011011
b. 10010111 + 11111111
c. 01110101 + 10101100

3. What is the decimal representation of each of the following 8-bit signed binary numbers?

a. 10110101
b. 00101010
c. 11110000

4. What is the decimal representation of each of the following signed binary numbers? Without calculation

a. 10000000
b. 11111111
c. 01111111

5. What is the hexadecimal representation of each of the following binary numbers?

a. 0011 0101 1101 1010
b. 1100 1110 1010 0011
c. 1111 1110 1101 1011

6. What is the binary representation of the following hexadecimal numbers?

a. 0126F9D4
b. 6ACDFA95
c. F69BDC2A

7. Calculate binary 00001101 minus 00000111.

8. Calculate **-126 - 3** after converting each number to 8-bit binary number.