## Exercise 1

## **List of Figures**

## **List of Tables**

- 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.