

### Nat 5 Homework 5

1. Convert **10010111** to decimal **(1)**
2. Convert **10101010** to decimal **(1)**
3. Convert **11100111** to decimal **(1)**
4. Convert the value **35** into an 8-bit binary number. **(1)**
5. Convert the value **107** into an 8-bit binary number. **(1)**
6. Convert the value **78** into an 8-bit binary number. **(1)**
7. Identify the mantissa and exponent of  $0.112 \times 10^4$  **(2)**
8. How many bits does Extended ASCII use to represent characters? **(1)**
9. What is the ASCII code for each of the following characters **(4)**
  - a. A
  - b. Z
  - c. Space
  - d. Full stop