

For the following questions, *show all of your work*. It is not sufficient to provide the answers.

Exercise 1. Convert the following numbers from base 7 to base 10:

- a. 1433_7
- b. 261.45_7

Exercise 2. Convert the following numbers from base 10 to base 7:

- a. 319_{10}
- b. 41.9_{10}

Exercise 3. Convert the following numbers from base 10 to binary, octal and hexadecimal:

- a. 273_{10}
- b. 118_{10}

Exercise 4. Convert the following numbers from hexadecimal to decimal and to binary.

- a. $A1E9_{16}$
- b. $2C8B_{16}$