

For the following questions, *show all of your work*. It is not sufficient to provide the answers. Calculate only out to 2 decimal digits (if required).

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

a.  $1235_7$

b.  $21.34_7$

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

a.  $531_{10}$

b.  $19.8_{10}$

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

a.  $232_{10}$

b.  $171_{10}$

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

a.  $1B77_{16}$

b.  $ACDB_{16}$