



CSE Department, North South University  
ETE131: Introduction to Telecommunications  
& Computer Engineering (SyR)  
Problem Sheet 3: IEEE754 Format Numbers

1. Represent the decimal number 10.28125 in IEEE 754 Single Precision format.
  
2. Represent the decimal number -52.375 in IEEE754 Double Precision format.
  
3. Find the approximate decimal value of the following numbers that are represented using IEEE 754 Single Precision format [4.5]:
  - a. 00000000010110000000000000000000
  - b. 10111111101001000000000000000000
  - c. 01111111100000000000000000000000
  
4. Store the following binary numbers in IEEE Single Precision format.
  - a.  $0.0010110011101 \times 2^{-125}$
  - b.  $-11110.01100001 \times 2^{-127}$
  - c.  $0.10011000000001 \times 2^{100}$