

Math 4329: Worksheet 02
Dr. Natasha Sharma

Name: _____

1. Convert 18.625 to the binary format. Also, write 736 in its hexadecimal format.

2. Determine the number x that has the following binary format:

$$(111\ 111\ 101.11)_2$$

3. Recall the **single** precision representation for any number y is

$$y = \sigma \cdot (1.a_1a_2a_3 \cdots a_{23}) \cdot 2^{E-127}, \text{ where } E = (c_1c_2c_3 \cdots c_8)_2.$$

Please express the number x obtained above in its single precision representation.