

# Homework 4

Benny Chen

October 28, 2022

## Problem 1

Convert the following binary numbers to decimal.

1.  $0b1011.1101 = 8 + 2 + 1 + 0.5 + 0.25 + 0.0625 = 11.8125$
2.  $0b0.00111 = 0.125 + 0.0625 + 0.03125 = 0.21875$

## Problem 2

Find the normalized (binary) representation of the following single-precision floating point numbers. Then, write the number in a) in decimal, and write the significand in b) in decimal.

1.  $0x45652$