HW5 Answer Keys/Tips

RARS has a tool for us to practice single-precision floating-point numbers. The exponent for denormalized numbers is not correct in the tool.

Q1

a. 11.8125

b. 0.21875

Q2

a. When you see the correct answer, you know it is right.

b. 1.75×2^{-131}

Q3

0xBC7D1EB8

0xC44FF99A

Q4

0x4B7FFFFF

Q5

Similar to earlier RISC-V coding questions. Pay attention to calling convention involving floating-point registers.

Also, an array of floating-point numbers is an array, and it is passed to a function as an array.

Q6

a. 2.6
b. 3.3
c. 1.18
d. 2.25
e. 1.22

Q7

a. 1.25
b. 1.44
c. 2.012
d. 1.1044