

Today's Plan!

1. Course evaluations
⇒ hard copy course eval's
⇒ class climate (online)

2. Review / QA on final
Exam

3. Anything else you may have.

Final Exam

⇒ Monday or from week

11:00-13:00

? Here?

Convert to binary

$$9.125 \Rightarrow$$

$$-3.625 \Rightarrow$$

Binary

$$1001.001$$

1101

2 | 9

4 R1

2 R0

1 R0

0 R1

Floatng Point

Making Floating Point # 1s IEEE 754

.5 .125 0

.25 0

.125 1

.5 .65 1

-.5 0

.125 1

Normalize

1.001001 x 2³

-1.1101 x 2⁻¹

Scientific Notation

bits \Rightarrow 127

130

IEEE Floating point

S	Exponent	Fraction
1 bit	8 bits	23 bits
0	10000010	00100100000000000000000
1	10000000	11010000000000000000000

Add the #'s

First Step!
Set up the same exponents.

$$\begin{array}{r} 1,001001 \times 2^3 \\ + \underline{1,1101} \times 2^1 \\ \hline \end{array}$$

$$\begin{array}{r} 1,001001 \times 2^3 \\ - 0,011101 \times 2^3 \\ \hline 0,101100 \times 2^3 \end{array}$$

Answer

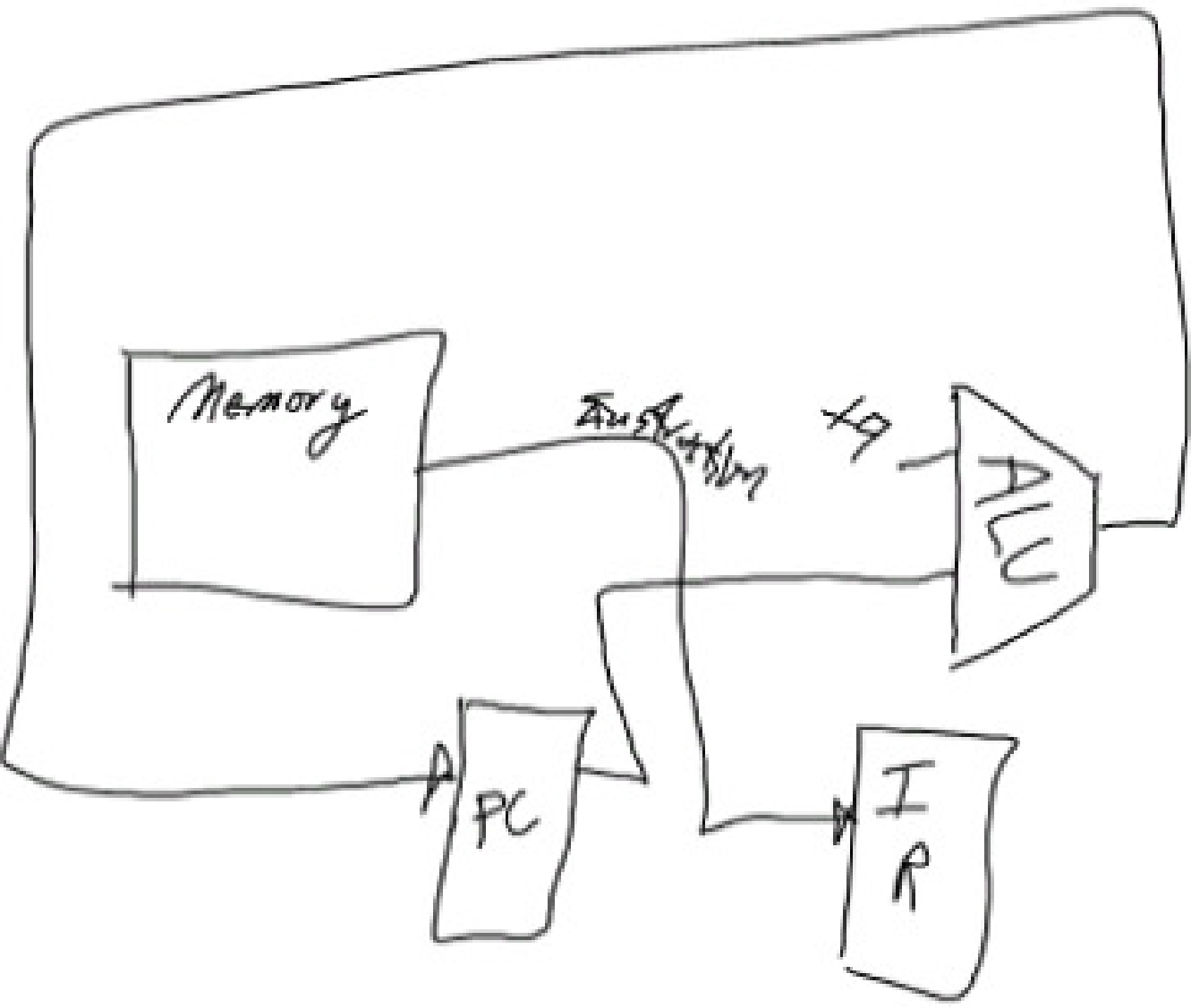
$$\begin{array}{r} 9.125 \\ - 3.625 \\ \hline 5.500 \end{array}$$

Not Normalized

$$1,01100 \times 2^2$$

$$10101 \times 2^0$$

5.5



Others?

Have a donut on the
way out.

See you Monday