1. ***(12 points) Hands-On Exercises*:** 1-3, p. 267.
   1. If you placed 100 in R0 it would subtract Bus A from Bus B and result in 0.
   2. Change the ALU settings to A+B
   3. Two cycles. The first cycle adds two of them, the second cycle adds the sum with the other R and stores it in R3.
2. ***(12 points) Hands-On Exercises*:** 4-6, p. 270.
   1. A bus address and B bus address are R0 and R3... ALU Operation is A+B... ALU is connected to C Bus... C Bus is connected to Main Memory Bus.... RW is 4.
   2. RW is 4... ALU is disconnected from C Bus... Main Memory Bus connected to C Bus lending number... C Bus connected to Register Bank... C Bus Address is R0...
   3. It would take three cycles. The first cycle to store the value at memory location 5 in the register. The second to store the value at memory location 6 in the register. The third cycle adds the values and stores them in location 7 of the main memory.
3. ***(4 points) Hands-On Exercises*:** 7, p. 277. <http://bkcollege.ezirim.com/homeworks/lab9.htm>
   1. Subtract R0 from R0 and store in R0.
   2. Store R0 in Main Memory slot 3
   3. Halt
4. ***(12 points) Hands-On Exercises*:** 11-13, p. 279.
   1. After repeating twice, the program goes back to the beginning then meaninglessly iterates over the first statement without actually doing anything else.
   2. The function loads the value in memory location 5 into R0 so that R0 = 10 then the next loads the value in memory location 6 into R1 so that R1 = 4. The following function subtracts R1 from R0 then stores that value in R2, as 4 in memory location 7. The instructions are then halted.

<http://www.pages.drexel.edu/~spp53/cs164/HW5/drums.html>

<http://www.pages.drexel.edu/~spp53/cs164/HW5/piano.html>

<http://www.pages.drexel.edu/~spp53/cs164/HW5/guitar.html>

<http://www.pages.drexel.edu/~spp53/cs164/HW5/drums2.html>

<http://www.pages.drexel.edu/~spp53/cs164/HW5/piano2.html>

<http://www.pages.drexel.edu/~spp53/cs164/HW5/guitar2.html>

<http://www.pages.drexel.edu/~spp53/cs164/HW5/Pizza%20-%20Lab%205.html>