Practice problems (don’t turn in):

1. [DPV] Problem 2.4 (Choose from 3 algorithms)
2. [DPV] Problem 2.12 (Printing lines)
3. [DPV] Problem 2.5, parts a, b, d, i, j

For the recurrences, solve them in $O()$ notation (not $\Theta()$ notation). Where appropriate, you need to express your answer as a polynomial, in other words in the form $n^c$ for a constant $c$. For example, if you have a solution in the form such as $7\log_3 n$ then you need to reexpress it as in the practice problems, but if you have a solution such as $O(n^{\log_2 5})$ then that’s OK. You need to show your work for solving the recurrence. You can use the Master Theorem to check your work, but you will get zero credit if you just apply it without showing work for solving the recurrence. You might want to do the other parts as practice.
Problem 1  [DPV] Problem 2.16 (find x in an infinite array)

Answer:
Explain your algorithm in words, explain why it works, and analyze its running time
Problem 2  [DPV] Problem 2.17 (finding a fixed point)

Answer:
Explain your algorithm in words, explain why it works, and analyze its running time