Quick Quiz 10.4

1) space utilization & time efficency
2) space utilization
3) time efficency
4) T(n) have order of magnitudes f(n)
5) True
6) False
7) False
8) $O(n)$
9) $O(\log_2 n)$
10) False
11) recurvrance relation

Exercises 10.4

1) $O(n^3)$

2) $O(2^n)$

3) $O(n)$

4) $O(2^n)$

5) cout << "Hello World";

6) The big O notation represents the upper bound complexity of a code so going from $O(n)$ to $O(n^2)$ is ok just not the other way around.

7) $O(n)$

8) $O(n^2)$

9) $O(n^3)$

10) $O(n^2)$

11) $O(\log_2 n)$

12) $O(2^n)$