

Refs: Hashing Slide P.16,19

12 (a)

When load factor $\frac{n}{m}$ is close to 1, using chaining is better.

$$\text{Time of using chaining} = O\left(1 + \frac{n}{m}\right)$$

$$\therefore \text{open addressing} = \text{close to } O(n)$$

(b)

Dynamic hashing uses less space when only a few (key, value) is inserted.

Standard hashing uses a fixed amount of space, can't expand when needed, and wastes space when load factor is low.