

Homework 2 Answers

Answers

1 a). Is it true that all odd squares are $\equiv 1 \pmod{8}$?

Yes

1 b) Even squares (mod 8)

No, for example 4^2

2. a. $O(n)$ this means that in the worse case the time is linear w.r.t. the input size

b. $O(1)$ - here the time is constant, no matter what the input size

c. $O(\log n)$ - here the time varies according to the log of the input size

For a proof size we would like $O(1)$