

Homework, Lecture 8

Problem A. Find a nonce which produces five 00000 starting with a message "BBB".

Problem B. Derive the distribution of time it takes to successfully mine a block. Calculate mean and standard deviation for the time it takes for a miner whose share of hashing power is q to find a block.

Problem C. Explain why two nonces are needed to find a block.

Problem D. Design an algorithm to estimate the amount of bitcoins actually spent per block.