

Question 1

- (a) Why do we have a cache in a computer?

- (b) I have an SRAM with random access time s , and a DRAM with random access time d . The probability of finding an entry in the SRAM is p . If I assume $d = 100s$, what value of p do I need so that the expected lookup time is twice as long as the random access time of the SRAM?