

EEL 5764 Computer Architecture  
Fall 2019  
**Problem Set 1**

The submission of problem set assignments is optional. If you choose to submit this assignment, the credits will be added to improve upon your final grade.

1. State true or false. Add brief explanations if required (1-2 sentences):
  - a. The amended version of Moore's law applies to modern-day chip designs.
  - b. The MTBF is defined by the difference between MTTF and MTTR.
  - c. The MIPS architecture is an example of CISC.
  - d. Temporal locality states that recently used items are less likely to be accessed soon.
  - e. The data transfer between cache and memory takes place in the form of a block.
2. Complete the following exercises of Chapter 1 of the referred textbook (Computer Architecture: A Quantitative Approach -- 6<sup>th</sup> edition) -- 1.8, 1.9, 1.11, 1.15, 1.16.