

Student ID: _____

Name: _____

Northwestern University
Department of Electrical Engineering and Computer Engineering
EECS 361 Computer Architecture

Instructor: Gokhan Memik (memik@eecs.northwestern.edu)

Quiz 1

1. What does Moore's Law state?

Number of transistors on an integrated circuit will double approximately every two years (the original prediction was for the number of transistors to double every year).

2. What is the relation between Performance and Execution time?

$\text{Performance} = 1/\text{Execution Time}$

3. What are Micro and Macro benchmarks used for?

Microbenchmarks focus on a specific attribute of a system, such as cache bandwidth or register performance. Hence, they are used to measure the performance of a component in the system. Macrobenchmarks, on the other hand, are more generic and measure performance of multiple components, hence they are used to measure the whole system performance.