

Homework 1

For all of the calculations below you cannot use a calculator or converter program, and you must show your work. (26 points total)

1. Convert the following binary numbers to decimal numbers.
 - a) 1011011
 - b) 1101101110
 - c) 10111101010
2. Convert the following decimal numbers to its binary numbers.
 - a) 69
 - b) 326
 - c) 1001
3. Convert the following binary numbers to its hexadecimal numbers.
 - a) 10101011
 - b) 111001101110
 - c) 10111101010
4. Convert the following hexadecimal numbers to its binary numbers.
 - a) 66
 - b) E3
 - c) 2FE8
5. Who is Jack Kilby, and what is his "long speech?"