

Homework Assignment #1

Reading Assignment:

Chapter 1 in the textbook Logic and Computer Design Fundamentals, 4th Edition by Mano

Problem Assignment:

Note: You must show your work for all conversions. If you have a calculator that can convert between bases, use it only to check your results. No calculators of any type will be allowed on the first test.

Chapter 1 problems: 4, 7, 8, 9, 10, 11, 12, 13, 18, 24, 26

Problem Format and On-Line Solutions:

Solutions to selected problems are available at the companion website for the textbook: www.prenhall.com/mano. The solutions presented there are typically brief and should just be used to check your results. Your solutions should include:

- Given information with the problem
- Detailed solutions
- Boxed answers (where appropriate)

If your solutions look like a copy of the online solutions, no credit will be given.

Selected Answers:

- 4) a) $96 \times 2^{10} = 98,304$ bits b) $640 \times 2^{20} = 671,088,640$ bits c) $4 \times 2^{30} = 4,294,967,296$ bits
8) a) 11000001 b) 1011101111 c) 11111010111 d) 100101111111010
12) a) 10001111 b) 0110010 c) 10000011101
13) Quotient = 10001, Remainder = 1
24) Go_!
26)

Decimal	32	33	34	• • •
binary – odd	1000000	1000011	1000101	• • •
binary - even	1000001	1000010	1000100	• • •