

Be familiar with the Boolean Algebra Properties and Theorems.

Be familiar with, knowledgeable of, and be able to solve problems associated with

Logic Gates Switch Analogies	(Page 1 of Digital Logic Gates Handout)
Universal Capabilities of NAND Gates	(Page 2 of Digital Logic Gates Handout)
Bubble Pushing & Logic Identities	(Page 3 of Digital Logic Gates Handout)

Construct true tables for AND, OR, XOR, EQV, NAND, NOR gates.

Prove DeMorgan's Theorem using truth tables.

Design AND, OR, NOR, XOR, and EQV gates using only NAND gates (simple inverters are okay as needed).

Determine the Truth Tables for logic gate circuit diagrams (Digital Logic Gates Practice Problems #1).
Use True Tables and/or Boolean Algebra to simplify the logic gate implementation where possible.

Solve Logic Input/Output Problems (Digital Electronics Quiz Problem #9).

Compare & Contrast and list advantages & disadvantages of *serial* and *parallel* pulse trains.

The following topics will **NOT** be covered on Test Seven:

- Binary Number System
- Octal Number System
- Hexadecimal Number System
- Binary / Decimal Conversions
- Binary Arithmetic
- ASCII Codes, Grey Codes, Binary Coded Decimals
- Hamming Correction Codes
- Positive and Negative Logic