

Be familiar with the Boolean Algebra Properties and Theorems.

Convert binary number to decimal and decimal number to binary.

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).

Be familiar with, knowledgeable of, and be able to provide examples of

- ASCII Codes
- Grey Codes
- Binary Coded Decimals
- Hamming Correction Codes

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

Provide examples of and explain positive and negative logic.

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).