Logic

BOOLEAN OPERATORS AND TRUTH TABLES
1. Operator Names: and, or, not, if…,then…, if and only if, nand, nor, xor, xnor
2. Rules
3. Constructing a truth table
   a. Two variable
   b. Three variable

LOGICAL EQUIVALANCE AND CONDITIONAL STATEMENTS
1. Mathematical notation and definition of Logically Equivalent
2. Tautology and Contradiction
3. Conditional, Inverse, Converse, and Contrapositive

SYMPIFYING STATEMENTS
1. De Morgan's Law and other useful logical equivalences
2. Simplifying a statement using logical equivalences
3. Sixteen unique two variable truth tables
4. Simplifying a statement by identification of the truth table output string

LOGIC GATES
1. Logic gate diagram symbols
2. Creating a truth tables for logic gates
3. Processing strings through logic gates
4. Integrated Circuit gates

TRANSLATING GATE DIAGRAMS TO STATEMENTS AND VICE VERSA
1. Given a logic gate diagram, write the statement it represents
2. Given a logic statement, create its logic gate diagram
3. Given a logic gate diagram, create a simplified logic gate diagram