

1. Computer Number Systems

Multiply and express the answer in octal:

$$FF_{16} * 10001_2$$

2. Boolean Algebra

Simplify :

$$\overline{(A + B)} (A\overline{B} + B\overline{C})$$

3. Boolean Algebra

How many ordered triples make the following expression FALSE?

$$\overline{A}(B + \overline{C}) + A\overline{B}C$$

4. Bit String Flicking

Evaluate:

$$(RCIRC-3 (LSHIFT-1 (LCIRC-2 (RSHIFT-1 10110))))$$

5. Bit String Flicking

Solve for X (a 5-bit string):

$$(LCIRC-2 01110) \text{ AND } X = (RSHIFT-1 10011)$$