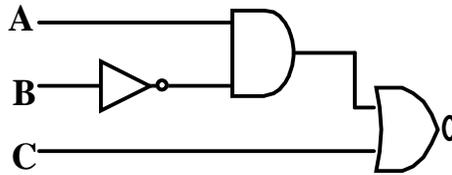


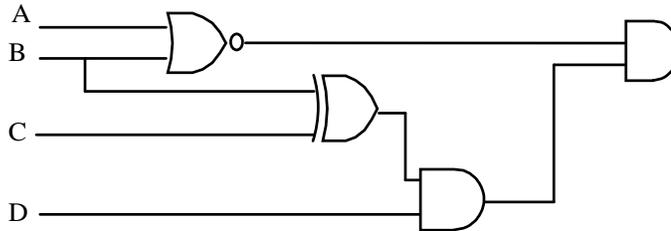
1. Digital Electronics

Find all ordered triples (A,B,C) that make the circuit TRUE.



2. Digital Electronics

Suppose that B is always FALSE. Find a simplified Boolean expression for the circuit.



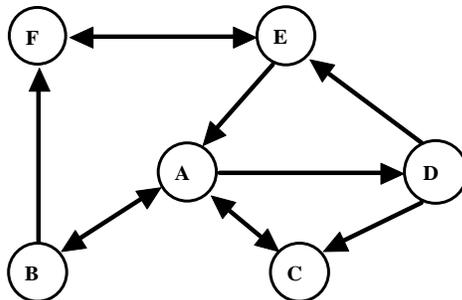
3. Boolean Algebra

Simplify completely

$$(A + B) \oplus AB$$

4. Graph Theory

How many 1's are in the adjacency matrix of the below graph?



5. Graph Theory

A complete, undirected graph is one in which there is an undirected edge between every pair of distinct vertices. How many edges exist in a complete, undirected graph with 10 vertices?