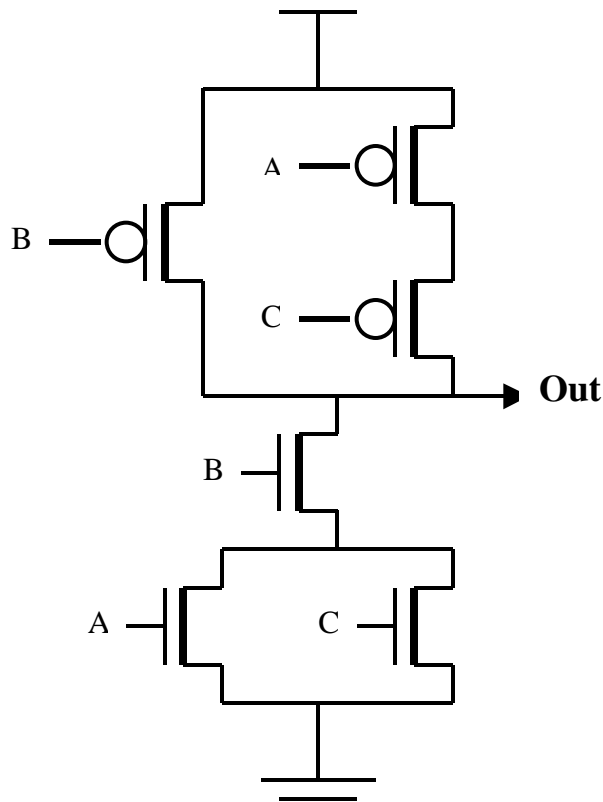


Transistor-Level Circuit Understanding

For the following switch level circuit, complete the truth table computed. If a floating or shorted output is detected, indicate that in the truth table. If no floats or shorts are detected, write the Boolean expression computed by the circuit.

A	B	C	Out
0	0	0	
0	0	1	
0	1	0	
0	1	1	
1	0	0	
1	0	1	
1	1	0	
1	1	1	



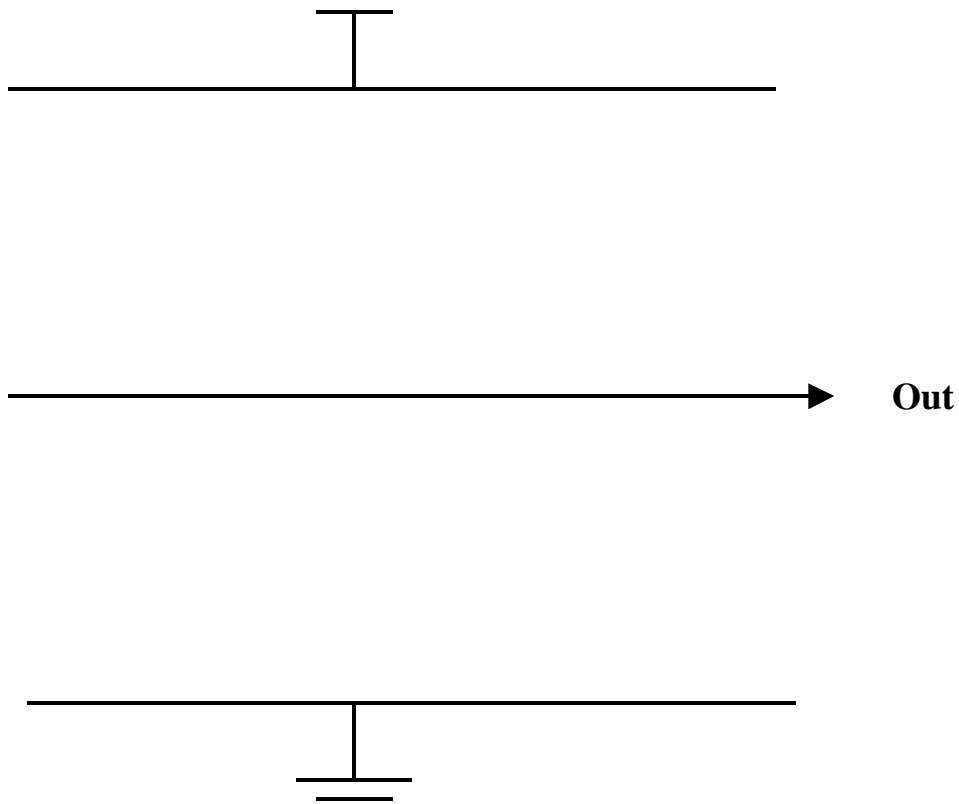
Write the Boolean expression for this function, Out = _____

Given the Boolean expression: $Out = A'C + ABC$

Complete the truth table.

A	B	C	Out
0	0	0	
0	0	1	
0	1	0	
0	1	1	
1	0	0	
1	0	1	
1	1	0	
1	1	1	

Draw the CMOS transistor diagram. Assume A, A', B, B', C, C' signals are available.



Given the truth table.

A	B	C	Out
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	1

Write the Boolean expression as 3 terms: Out = _____

Draw the CMOS transistor diagram. Assume A, A', B, B', C, C' signals are available.

