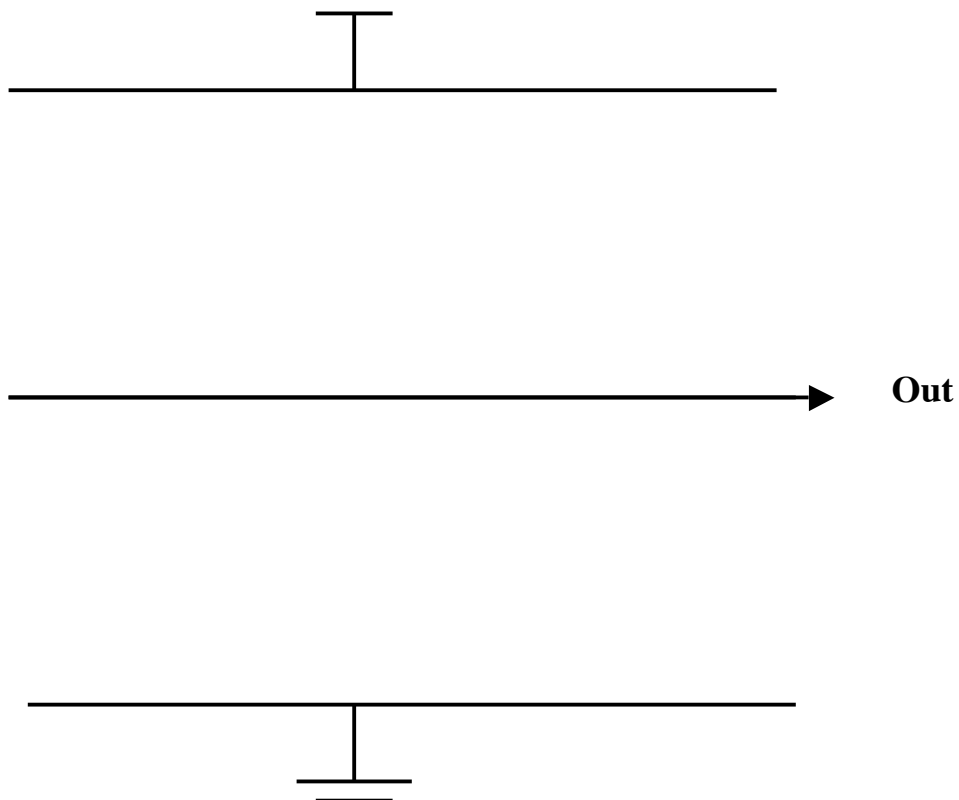


Given the Boolean expression: $Out = BC' + ABC$
 Complete the truth table.

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. Use only three p-mos and three n-mos transistors



Given the truth table.

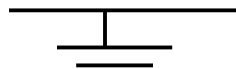
A	B	C	Out
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	0

Write the Boolean expression as 3 terms: Out =

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



Out



Bonus – use a Karnaugh map to find the simplest logic expression for Problem 3. There are three Essential Prime Implements.

A \ BC	00	01	11	10
0	1	1	0	1
1	1	0	0	0