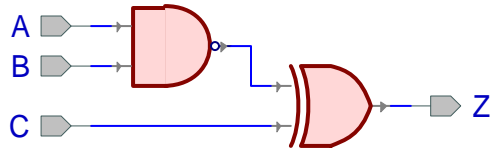


CSE370 Quiz 1 (6 October)

Name _____

Write the Boolean equation corresponding to the following circuit containing one NAND gate and one XOR gate.



$$\begin{aligned} Z &= (A \bullet B)' \oplus C = (A \bullet B)' \bullet C' + (A \bullet B) \bullet C = (A' + B') \bullet C' + A \bullet B \bullet C \\ &= A' \bullet C' + B' \bullet C' + A \bullet B \bullet C \end{aligned}$$

Complete the following truth table corresponding to the function above.

A	B	C	Z
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	1