Homework #2
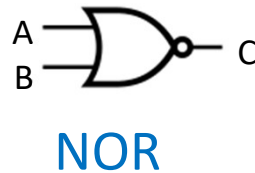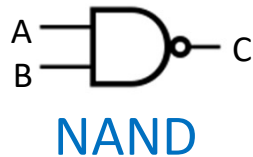
1. Functionality of the Basic Gate

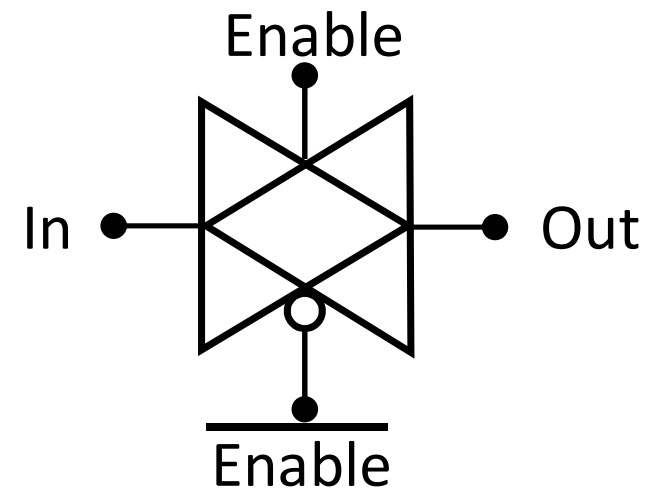Please verify the functionality of the 2-to-1 NAND, NOR, XOR in DC and AC operations.

A
B
C

NAND

A
B
C

NOR

A
B
C

XOR
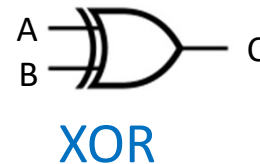
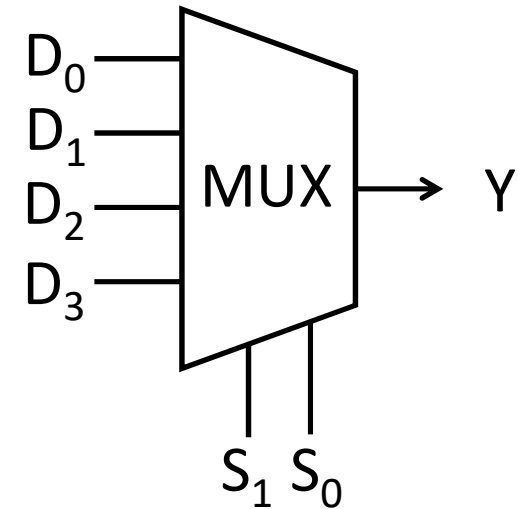## 2. Functionality of the Transmission Gate

Please verify the functionality of transmission gate in DC and AC operations.

Enable

In

Out

Enable

3. Functionality of the Basic Gate

Please verify the functionality of the 4-to-1 MUX.

D_0
D_1
D_2 MUX → Y
D_3

S_1 S_0

4. Functionality of the Decoder

Please verify the functionality of the 3-to-8 decoder.

A
B   3 × 8
C   Decoder

EN

D0
D1
D2
D3
D4
D5
D6
D7