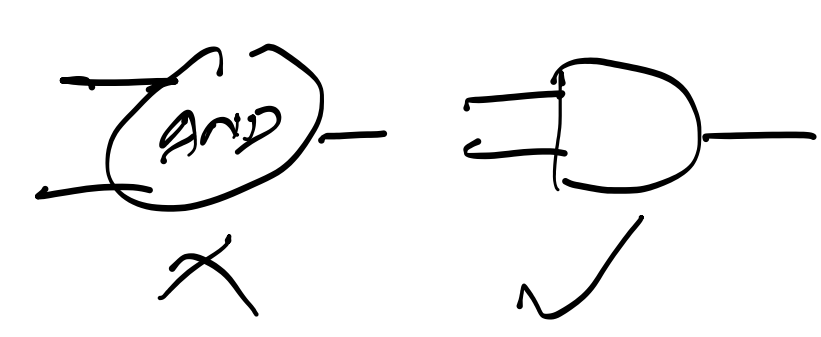
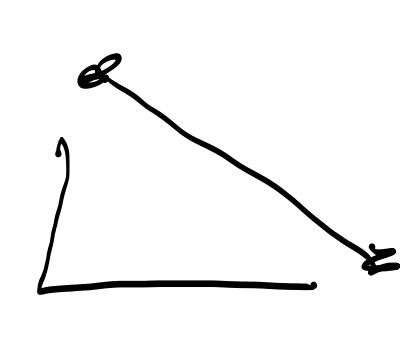
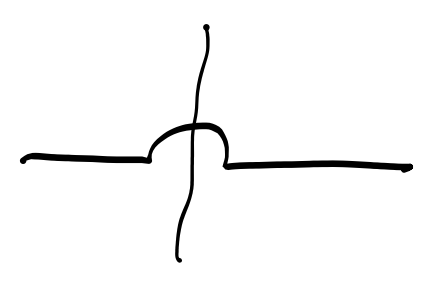
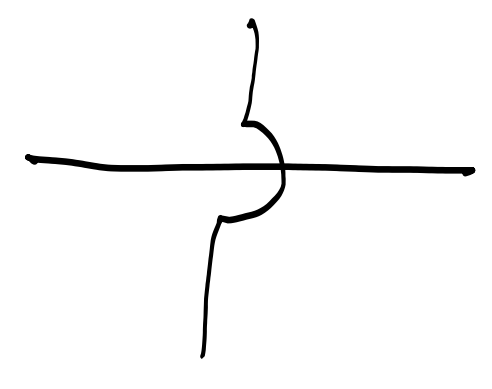
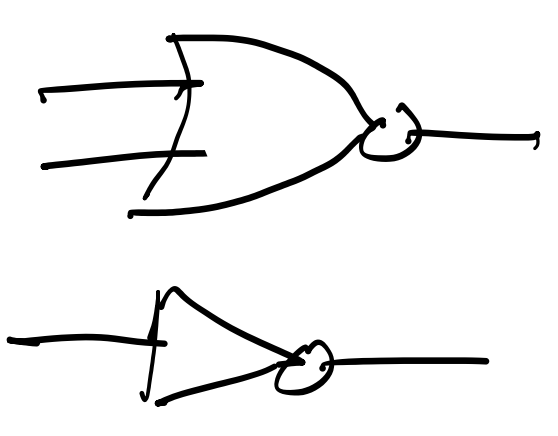
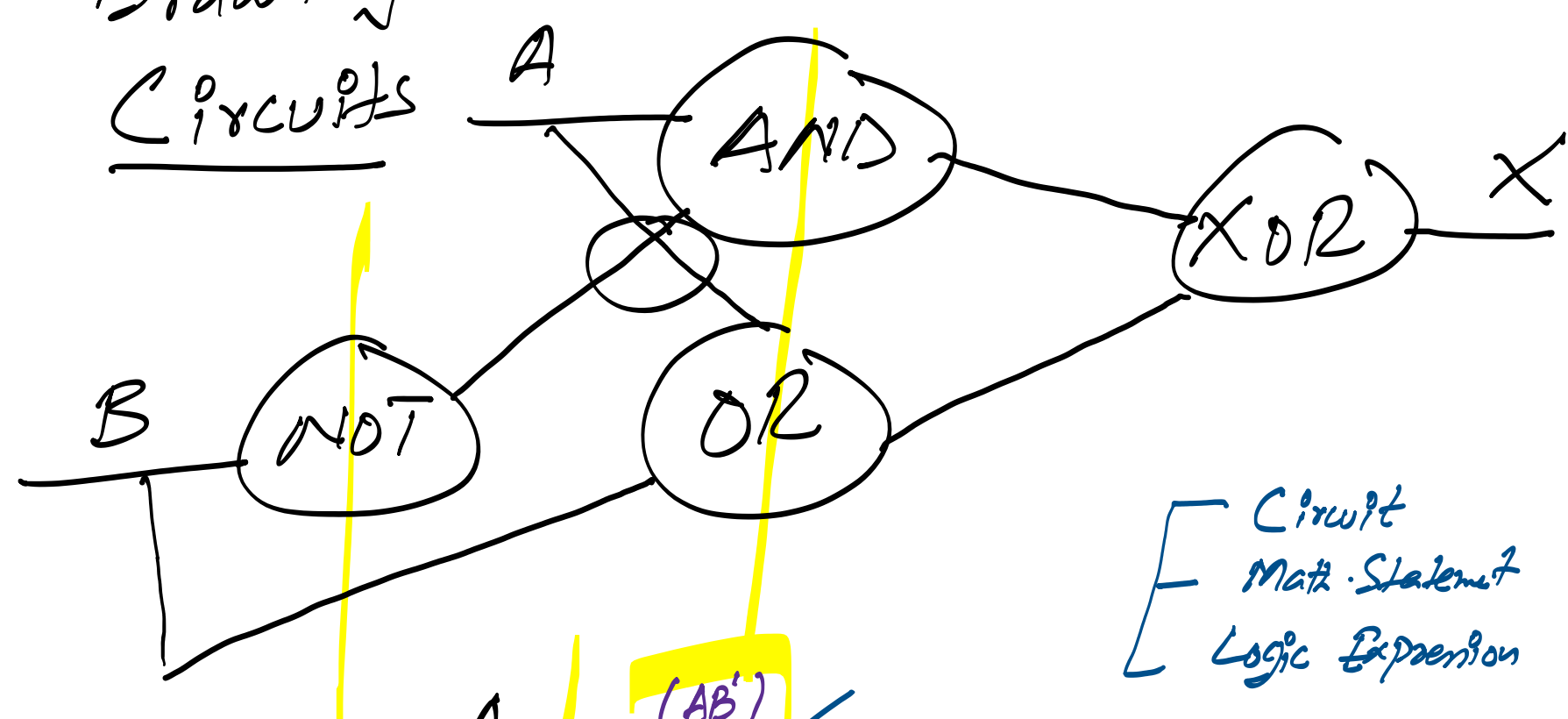


- ✓ 1. Knowing Gates
- ✓ 2. Drawing circuit
- ✓ 3. Math Statements  
↳ circuits
- ✓ 4. Logical Expressions  
↳ circuits
- ✓ 5. Building Blocks
- 6. Truth Tables.

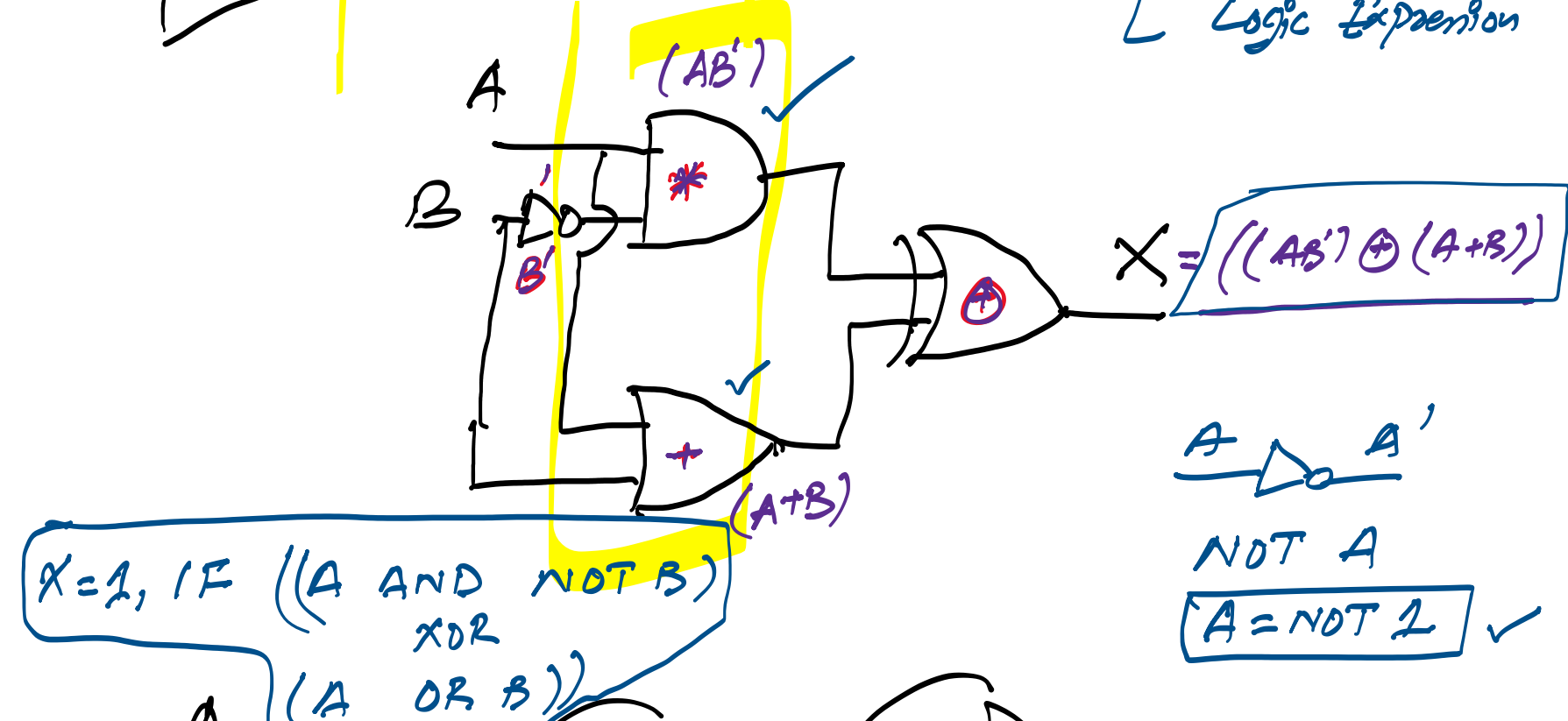
MPL Symbols	Logic	Math Symbols
	AND	*
	OR	+
	XOR	$\oplus$
	NOT	'
<div> <div> </div> <div> <b>NAND</b> <b>NOR</b> </div> </div> <div>             Universal (Building Blocks) Gates              memories              [SSD]         </div>		



## 2. Drawing Circuits

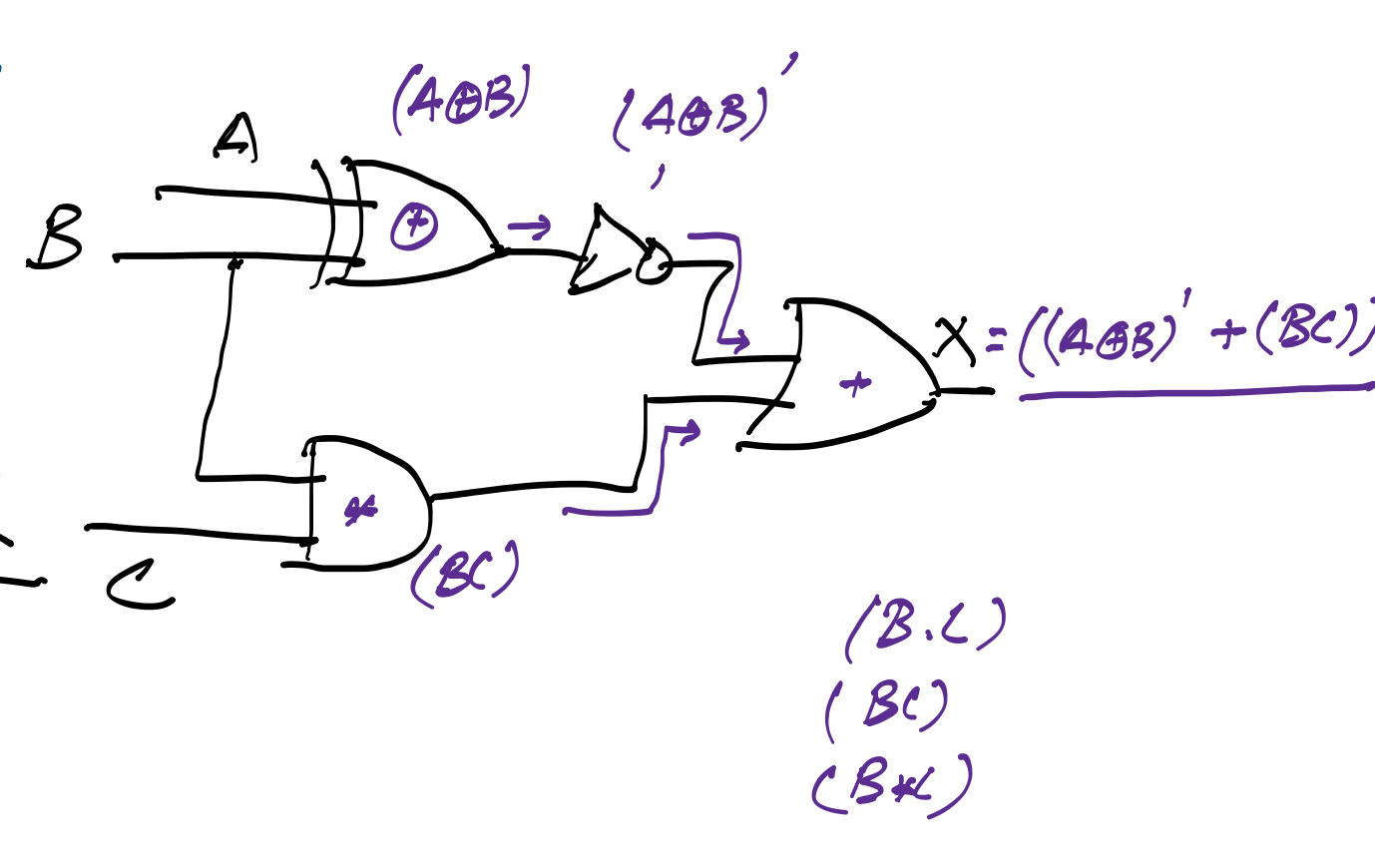


Circuit  
Math Statement  
Logic Expression



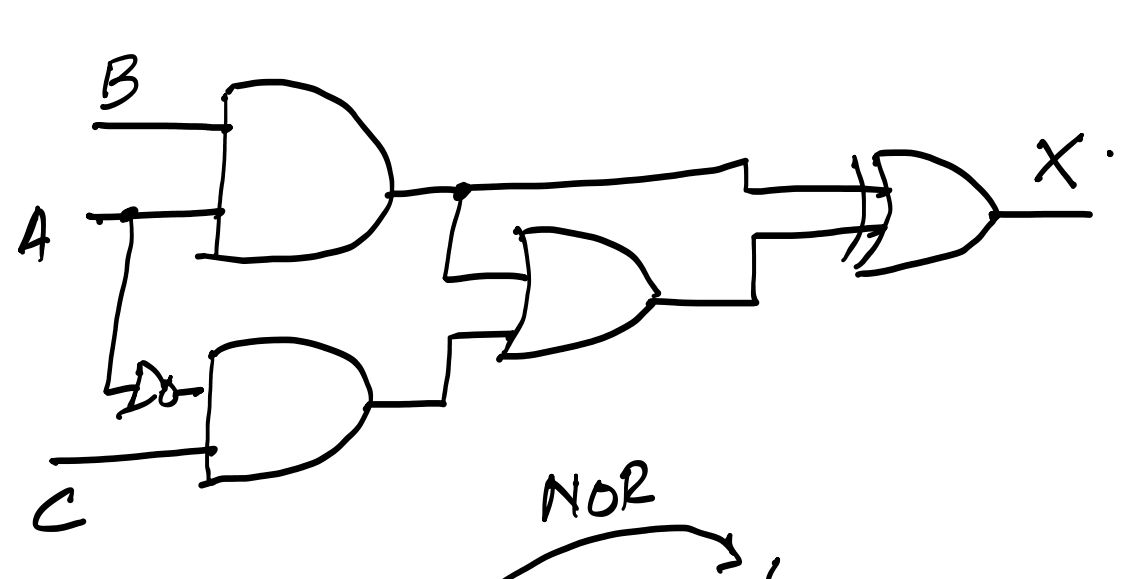
$X=1$ , IF  $((A \text{ AND } \text{NOT } B) \text{ XOR } (A \text{ OR } B))$

$A \rightarrow A'$   
NOT A  
 $A = \text{NOT } 1$  ✓



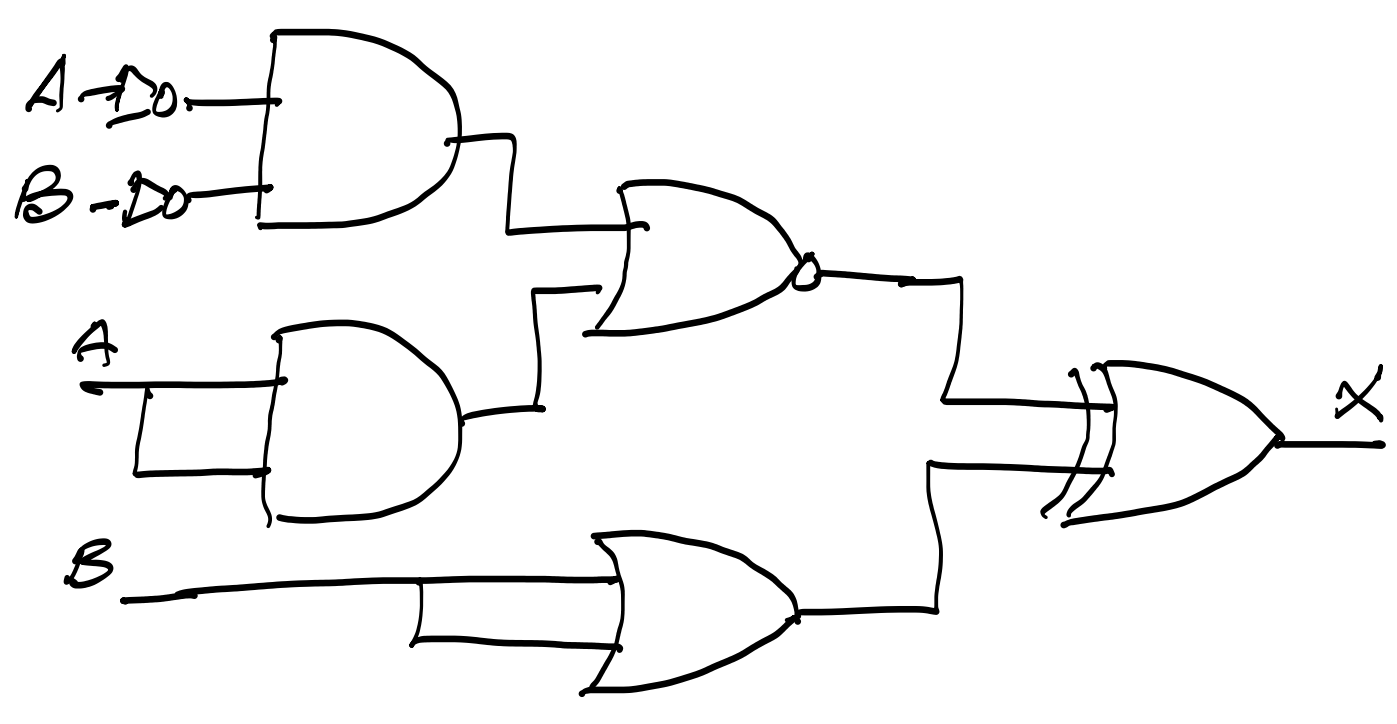
$X=1$ , IF  $((A \text{ AND } B) \text{ OR } (\text{NOT } A \text{ AND } C)) \text{ XOR } (A \text{ AND } B)$

1.  $X = ((AB) + (A'C)) \oplus (AB)$

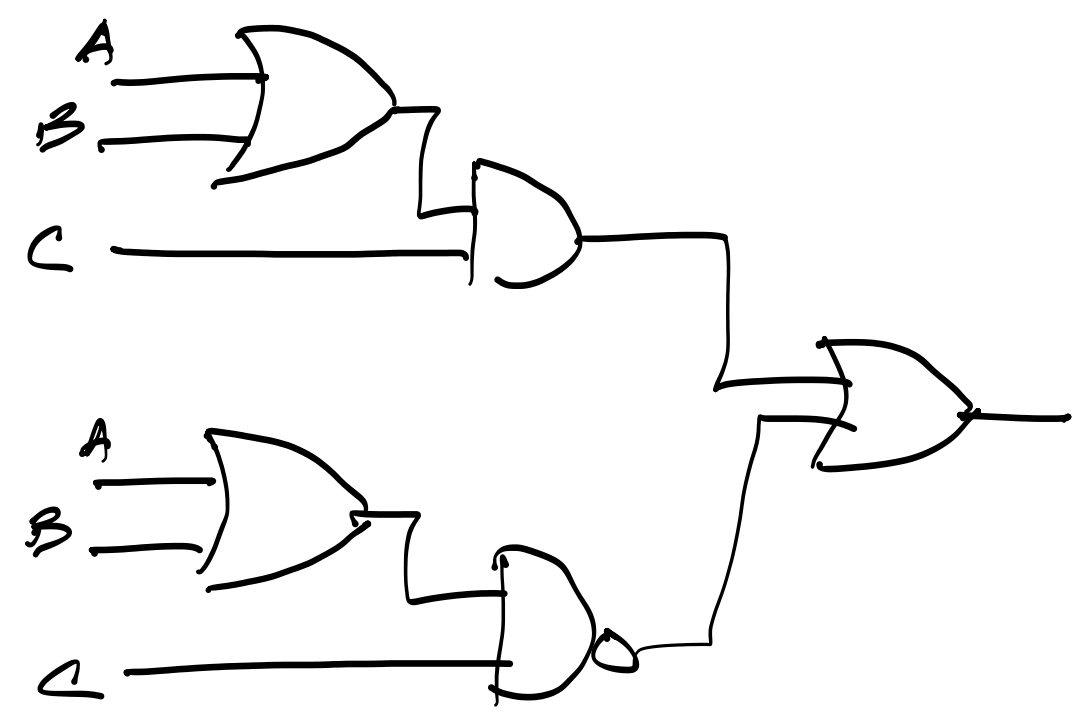
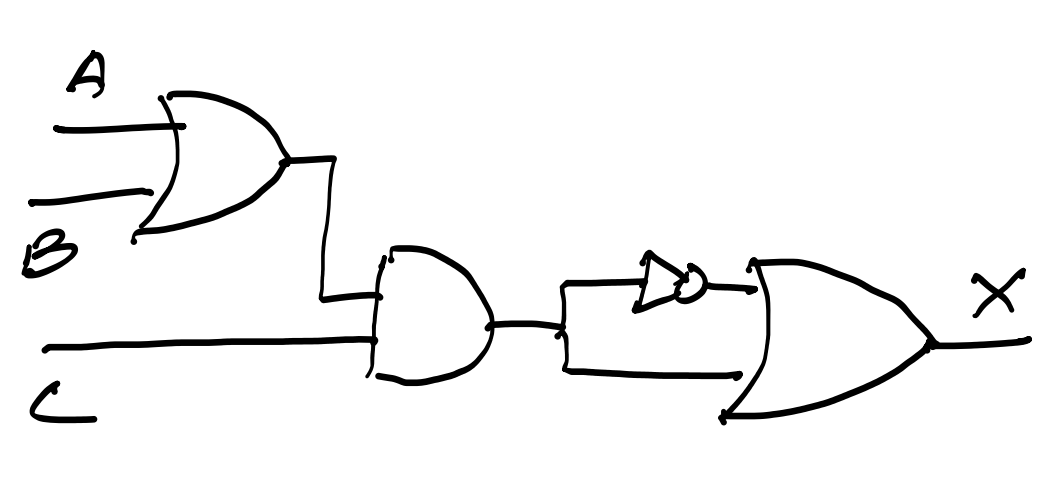


2.  $X = (((A'B) + (AA))' \oplus (B+B))$

$X=1$ , IF  $((\text{NOT } A \text{ AND } \text{NOT } B) \text{ NOR } (A \text{ AND } A)) \text{ XOR } (B \text{ OR } B)$



3.  $X = ((A+B) \cdot C) + ((A+B) \cdot C)'$   $(A'B)' \neq (AB)'$



## 6. Building blocks

Gate	NAND Logic	NOR Logic
------	------------	-----------

