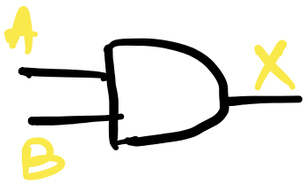
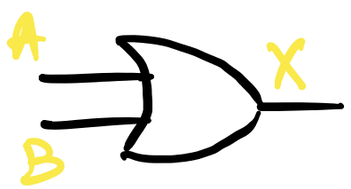
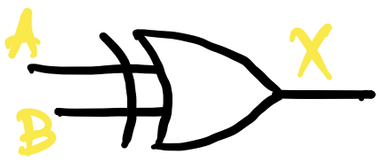
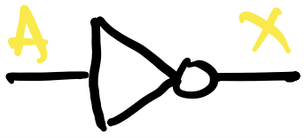
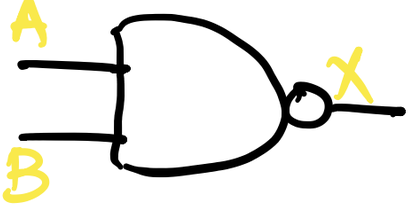
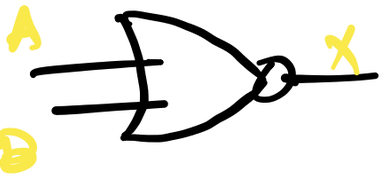
Logic Gates

Saturday, 17 December 2022 4:15 PM

1. Knowing Gates.
2. Drawing Circuits.
3. Writing mathmatical equation from circuits & vice versa.
4. Writing logical expressions from circuits & vice versa.
5. Building Blocks.
6. Truth tables.

MIL-Symbols.	Logic	Maths. OP:	Maths. Equations.	Logical / Boolean Expression.
	AND	*	$X=(AB)$	X=1, IF (A AND B)
	OR	+	$X=(A+B)$	X=1, IF (A OR B)
	XOR	⊕	$X=(A \oplus B)$	X=1, IF (A XOR B)
	NOT	'	$X=A'$	X=1, IF NOT A
	NAND		$X=(AB)'$	X=1, IF (A NAND B)
	NOR		$X=(A+B)'$	X=1, IF (A NOR B)

Characteristics :- - Circuit shortners.
- Building Blocks.
- Storages circuits.

TRUTH TABLE:

$2^2 = 4$ ← 0, 3

2^n — A, B

A	B	(AB)	(A+B)	(A⊕B)	A'	B'	(AB)'	(A+B)'
0	0	0	0	0	1	1	1	1
0	1	0	1	1	1	0	1	0
1	0	0	1	1	0	1	1	0
1	1	1	1	0	0	0	0	0
		AND	OR	XOR	NOT		NAND	NOR.