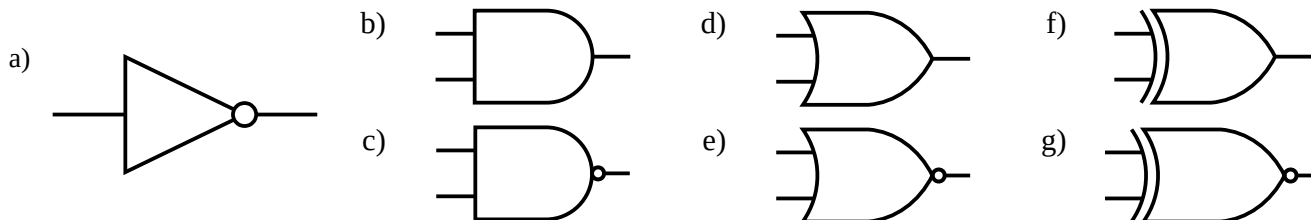
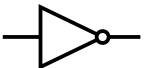
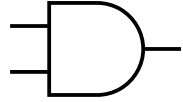
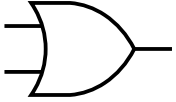
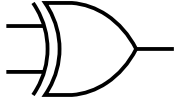


Boolean Algebra – Worksheet 1

1. Write the name of each logic gate inside the gate (AND, NAND, NOR, NOT, OR, XNOR, XOR)



2. Fill in the table.

				
gate name				
set notation				
logic symbol				$\vee$
Java bitwise operator				

2. Fill in the truth table.

		AND	NAND	OR	NOR	XOR	XNOR

3. Complete the following truth tables.

a)

A	B	$\neg A$	$\neg B$	$\neg A \wedge \neg B$	$\neg(\neg A \wedge \neg B)$	$A \vee B$

b)

A	B	$\neg A$	$\neg B$	$\neg A \vee \neg B$	$\neg(\neg A \vee \neg B)$	$A \wedge B$

e) Note that the final two columns of each table show **De Morgan's Laws**. Write these two equivalencies below: