

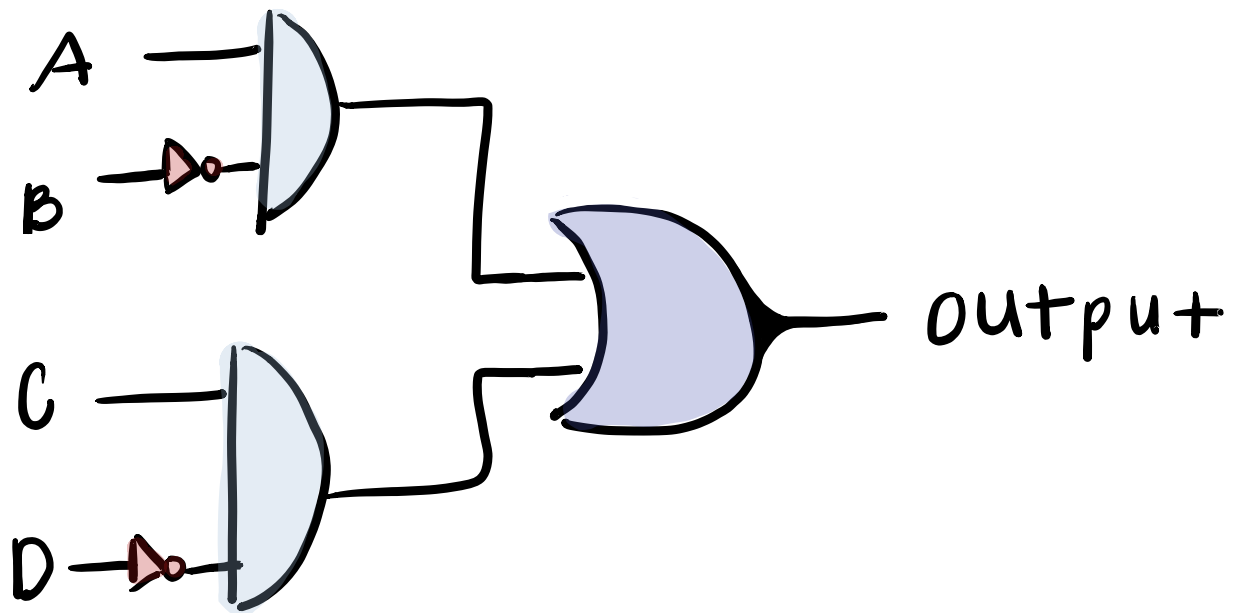
2. Draw a circuit with inputs A, B, C and D

$$(A \oplus !B) \parallel (C \oplus !D)$$

NOT

AND

OR



3. Draw a diagram expressing how the existing  
 how Y86-64 architecture could implement a new  
 iaddq instruction to accomplish this functionality:

	iaddq	V, rB
Fetch	icode: ifun	$M_1[PC]$
	rA: rB	$M_1[PC+1]$
	val C	$M_8[PC+2]$
	val P	$PC + 10$
Decode	val B	$R[rB]$
Execute	$val E \leftarrow val C + val B$ set cc	
memory		
Write back	$R[rB] \leftarrow val E$	
PC update	$PC \leftarrow val P$	

