

P	q	r	G	work space
T	T	T	T	$(p \wedge q \wedge r)$
T	T	F	F	$(p \wedge q \wedge \neg r)$
T	F	T	F	$(p \wedge \neg q \wedge r)$
T	F	F	F	$(p \wedge \neg q \wedge \neg r)$
F	T	T	F	$(\neg p \wedge q \wedge r)$
F	T	F	F	
F	F	T	F	
F	F	F	F	

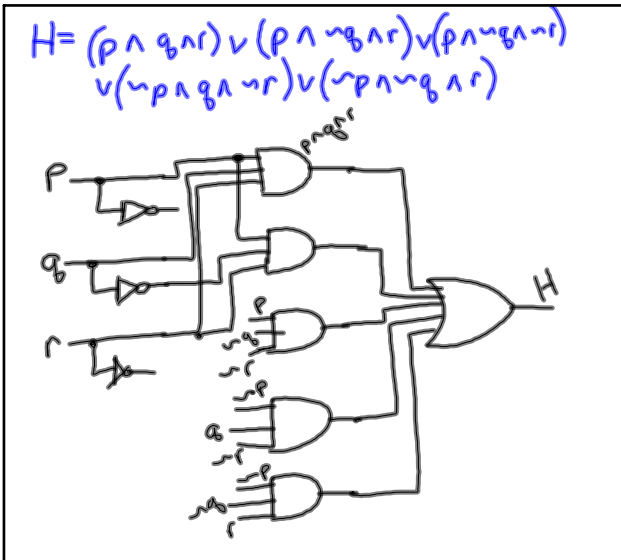
$G = (p \wedge q \wedge r) \vee (p \wedge q \wedge \neg r) \vee (p \wedge \neg q \wedge r) \vee (p \wedge \neg q \wedge \neg r) \vee (\neg p \wedge q \wedge r)$

Sep 6-9:56 AM

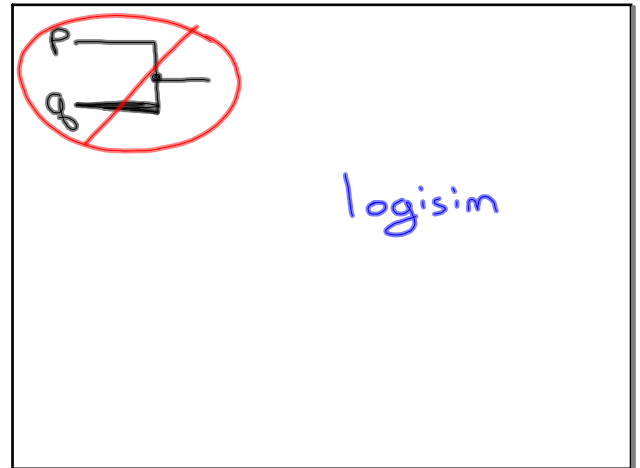
P	q	r	H
T	T	T	T
T	T	F	F
T	F	T	T
T	F	F	T
F	T	T	F
F	T	F	T
F	F	T	T
F	F	F	F

$H = (p \wedge q \wedge r) \vee (p \wedge \neg q \wedge r) \vee (p \wedge \neg q \wedge \neg r) \vee (\neg p \wedge q \wedge r) \vee (\neg p \wedge q \wedge \neg r)$

Sep 6-10:09 AM



Sep 6-10:16 AM



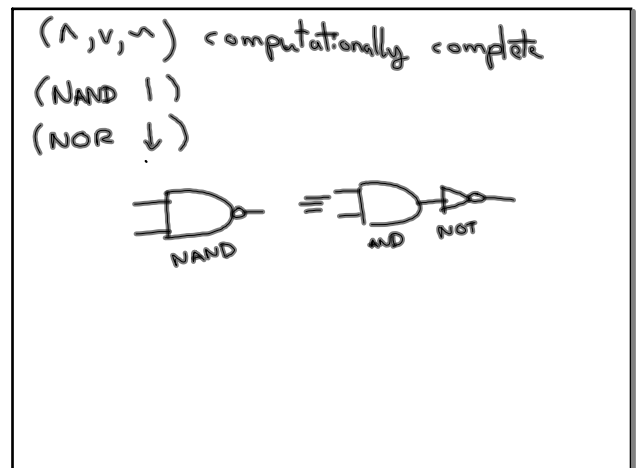
Sep 6-10:21 AM

$(p \wedge \neg q) \vee (\neg p \wedge q)$

P	q	
T	T	F
T	F	T
F	T	T
F	F	F

XOR

Sep 6-10:24 AM



Sep 6-10:33 AM

NOT

P	$\neg P$
T	F
F	T

$P \rightarrow \neg P$

AND

P	q	$P \wedge q$	$P \vee q$
T	T	T	T
T	F	F	T
F	T	F	T
F	F	F	F

$P \wedge q$

OR $P \vee q \equiv \neg(\neg P \wedge \neg q)$

$P \vee q$

Sep 6-10:38 AM

adder

	0	0	1	1
+	0	1	0	1
	0	1	1	0

0 → 00
1 → 01
2 → 10
3 → 11

A+B

A	B	A+B	
T	T	carry	sum
T	T	T	T
T	F	F	T
F	T	F	T
F	F	F	F

AND F XOR T

Sep 6-10:47 AM