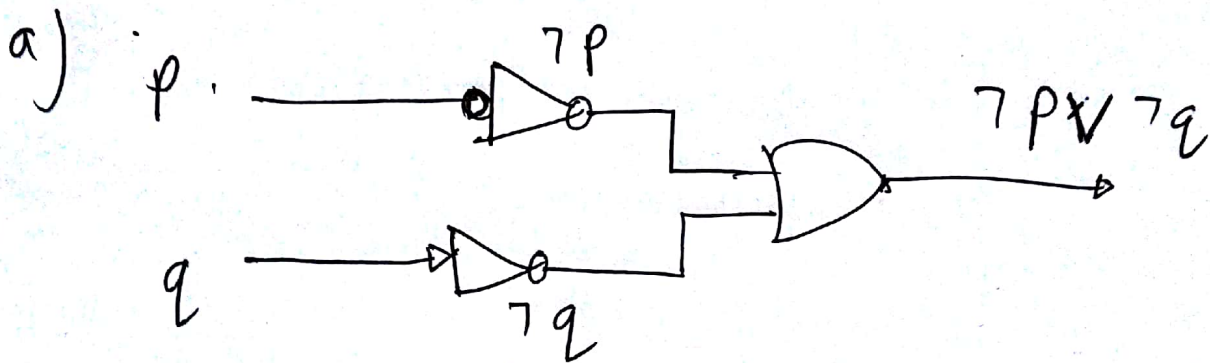student ID: 1205054
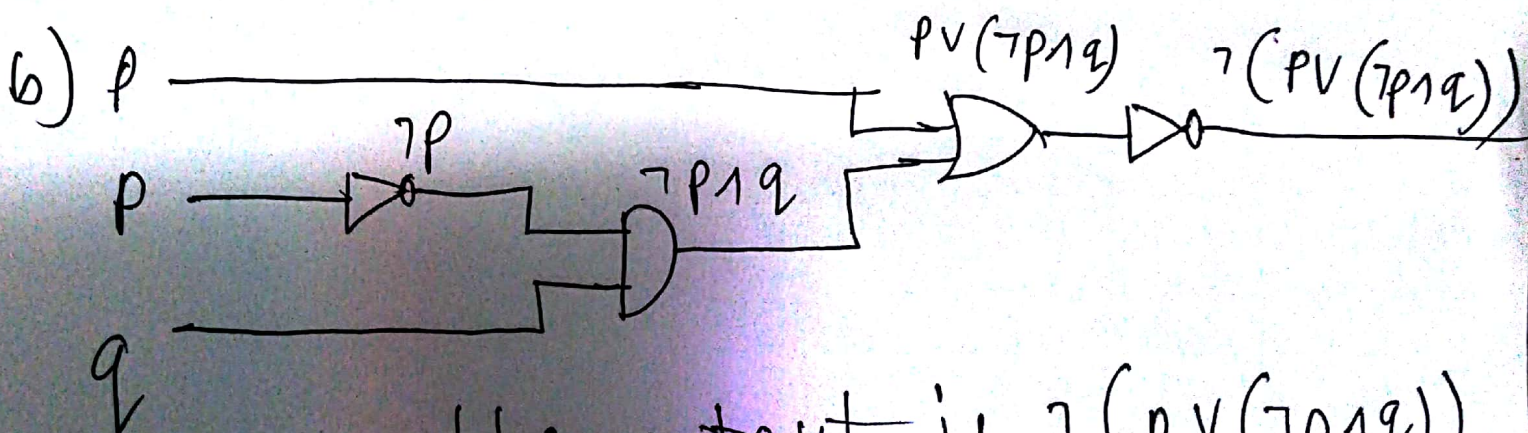
verifying student ID: 1205084

Chapter: 1, Section: 2

Solution: The output of combinatorial combinatorial circuits are:

a)

$p \cdot \quad \neg p$

$\neg p \vee \neg q$

$q \quad \neg q$

So the output is $\neg p \vee \neg q$.

b)

p

$\neg p$

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

p

$\neg p \wedge q$

q

So the output is $\neg (p \vee (\neg p \wedge q))$