

Exercise sheet 1

1. Verify the following using truth tables:
 - a. $P \vee P \wedge Q = P$
 - b. $P \wedge (P \vee Q) = P$
 - c. $P \vee (\neg P \wedge Q)$
2. Simplify the following boolean expressions:
 - a. $(\neg P \vee \neg Q) \wedge (\neg P \vee Q)$
 - b. $\neg P \wedge \neg(P \vee Q)$
3. Find a boolean expression for the following truth table and then simplify it:

P	Q	R
T	T	T
T	T	F
T	F	T
T	F	F
F	T	T
F	T	F
F	F	T
F	F	F

To be completed...