## MATH 270 <br> SUMMER 2007 <br> QUIZ 1

1. Use truth tables to show that the following propostional forms are equivalent.
a) (5 pt) $P \wedge(Q \bigvee R)$ is equivalent to $(P \wedge Q) \bigvee(P \wedge R)$.
b) (5 pt) $P \bigvee(Q \wedge R)$ is equivalent to $(P \bigvee Q) \wedge(P \bigvee R)$.
2. ( 5 pt ) Give an example of a contradiction (and explain why it is a contradiction). Also give an example of a tautology.
