

Math 308, Bridge to Advanced Math, Prof. Santoro

Quiz 2, September 17, 2015

NAME: Solutions

Write clear proofs with complete sentences for the following questions:

1. State the negation of each of the following statements.

- (a) At least two of my library books are overdue.

At most one of my library books is overdue

- (b) bf Exactly one of my two friends misplaced his homework assignment.

Either two or none of my two friends misplaced their homework assignment.

- (c) No one expected that to happen.

Someone expected that to happen

2. For statements P , Q and R , show that $(P \vee Q) \Rightarrow R$ and $(P \Rightarrow R) \wedge (Q \Rightarrow R)$ are logically equivalent.

Just write down the truth table.