

Mathematics 174

Quiz # 3

Name: _____

You must show your work to get full credit.

1. (a) Make the truth tables for $p \rightarrow q$ and $\sim p \vee q$.

(b) Explain why $p \rightarrow q$ and $p \rightarrow q$ are logically equivalent.

2. (a) Make the truth tables for $\sim (p \rightarrow q)$ and $p \wedge \sim q$.

(b) Explain why $\sim (p \rightarrow q)$ and $p \wedge \sim q$ are logically equivalent.

3. What is the negation of the statement: "If he is tall, he is a basket ball player."