

PRINT Your Name: _____

Quiz for January 12, 2006

Are the statements $(p \rightarrow q) \rightarrow r$ and $p \rightarrow (q \rightarrow r)$ logically equivalent? Prove your answer.

ANSWER: NO. If p and r are both false, then $(p \rightarrow q)$ is true and $(p \rightarrow q) \rightarrow r$ is false; but $p \rightarrow (q \rightarrow r)$ is true. (It does not matter what value q has. Also, you may draw the entire truth table in order to find the two lines where the truth values differ.)