MATH 323 Section 2

QUIZ 1

January 14^{th}*, 2013*

Your Name: _____

Hamlet famously states "To be or not to be. That is the question." Assuming that "to be" is a statement (meaning that there is a truth value for whether or not he should live or not), use a truth table to show that "to be or not to be" is a tautology (always true).

Solution:

Let p be the "to be." Then "To be or not to be" is $p \vee \sim p$. The truth table is:

p	$\sim p$	$p \vee \sim p$
T	F	T
F	T	T