## CS 329E Quiz 1: February 11, 2015

Name:		

Note that this quiz has two sides.

1. (10 points) Suppose you have a system with three subjects and three objects, with security levels as listed below.

Type	Name	Level
Subject	Subj1	$(H, \{A, B\})$
Subject	Subj2	$(L, \{A, B, C\})$
Subject	Subj3	$(L,\{\})$
Object	Obj1	$(L, \{B, C\})$
Object	Obj2	$(H,\{\})$
Object	Obj3	$(L, \{A, B, C\})$

Here H > L. The system implements a Bell and LaPadula model of security. Fill in the access rights ( $\mathbf{R}$  and/or  $\mathbf{W}$ ) permitted by the model for each subject/object pair in the access matrix below:

	Obj1	Obj2	Obj3
Subj1			
Subj2			
Subj3			

2. (5 points) In a BLP system, suppose any subject could raise the level of any object. Would this violate the weak tranquility property? (Start answer with "Yes" or "No.") Justify your answer.

3. (5 points) If the *metapolicy* of a system is what we really care about from a security perspective, why bother with a policy? (Mention as many reasons as you can think of.)