

## **In-class activity: Predicate Calculus Resolution**

A. Translate the following into the predicate calculus, starting by identifying the domain, predicates and any functions and constants:

Each University of Central Lake Union (UCLU) building must either have an emergency rowboat or be in violation of the Lake Quake code. Any building in violation of the Lake Quake code will be temporarily closed. The annex of Schwimmschach Hall has dinghies but no emergency rowboats.  
Therefore the annex of Schwimmschach Hall will be temporarily closed.

B: Express the negation of the conclusion.

C. Express the premises and the negation of the conclusion in clause form.

D. Prove the syllogism using resolution.