

# CS 205 Homework 1

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1. Express propositions as English sentences:

- (a) You miss the final exam unless you don't have the flu.
- (b) You will not pass the course if you have the flu or miss the final.
- (c) You have the flu and miss the final exam or you pass the course and attend the final exam.

2. State the converse, inverse, and contrapositive of English sentences:

- (a) Converse: If I stay home, it will snow tonight.  
Inverse: If it doesn't snow tonight, I won't stay home.  
Contrapositive: If I don't stay home, it won't snow tonight.
- (b) Converse: If I go the beach, then it is a sunny summer day.  
Inverse: If it isn't a sunny summer day, then I won't go the beach.  
Contrapositive: If I don't go to the beach, then it isn't a sunny summer day.
- (c) Converse:  
Inverse:  
Contrapositive: