

COSC 311: ALGORITHMS

MINI 11

Due Wednesday, December 5 in class

1. Suppose I've given a polynomial time reduction from problem V to problem W (that is, I've shown that $V \leq_P W$). Fill in the blanks:

If _____ cannot be solved in polynomial time, then neither can _____.

Explain why the above statement is true.

2. Suppose I have a problem Z that I want to prove is NP-complete. What are the two things I'd have to do to show this?