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 \underline{\hspace{2cm}} cannot be solved in polynomial time, then neither can \underline{\hspace{2cm}}.

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?