(3) NEW REDUCTIONS

**Subject:** Being able to apply the 5 steps studied in order to prove NP-completeness of a new problem

**Testing Method:**
I give you the "reduction idea" or the "reduction idea" is easy to derive. You write the NP-completeness proof.

(4) KNOWN APPROXIMATION ALGORITHMS

**Subject:** Understanding all approximation algorithms studied (in class or in assignments)

**Testing Method:**
I give you an instance of a problem and you apply the algorithm. You may have to answer questions about the approximation ratio or the optimal solution.