1. What is the definition of a mapping reduction from language *A* to language *B*?
2. What is the definition of ?
3. Suppose that and are both computable languages over alphabet . Show that B
4. Suppose that and are both computable languages over alphabet where and . Show that .
5. Suppose that B and is a regular language. Does that imply that is also a regular language? Justify your answer.
6. Suppose that is a language where HLT. Can you conclude that is uncomputable?
7. Define and Give a mapping reduction from to .