CSE 322 **Fall 1999**

Homework 6

Due Wednesday, December 1, 1999

A note on terminology: the class of **decidable** languages is also called **recursive** or **Turing-decidable**; the class of **recursively enumerable** languages is also called **enumerable** or **Turing-recognizable**.

1. [10 points] Problem 2.20 from text.
2. [10 points] Problem 3.8 (c) from text. Give a high level description, followed by a formal description of the Turing machine. For full credit, show two sample runs of your machine: one on a string in the language, the other on a string not in the language.
3. [12 points] Problem 3.14 (a), (d), (e) from text.
4. [8 points] Problem 3.15 (a), (d) from text.
5. [10 points] Problem 3.19 from text.