

CSE3311 Fall 2012

Quiz 1

Name: SOLUTIONS\_\_\_\_\_

Student#: \_\_\_\_\_

Show all work clearly and in order, and underline your final answers. Use Eiffel notation when necessary, sketch all relevant graphs and write down all relevant mathematics. You have 20 minutes to take this 20 point (2%) quiz.

**1.** (*10 points*) What is Abstract Data Type (ADT)? Enumerate main elements that has to be documented.

**Answer:** ADT is an abstract description data/objects/structures that are used in the system. It describes API hiding at the information. It is a model for a class. Minimum documentation covers: Objects (Types), Operations(Functions)/API (signatures, pre and post conditions), invariants (axioms)

**2.** (*10 points*) Describe **Adapter** structural pattern. (Use the other side of this sheet if you need more space)

**Answer:** Adapter is a structural pattern that converts interface of a class into another interface that the client expects. (5 points)

Additional 5 points for a diagram of adapter showing both inheritance and and uses (class adapter and object adapter) 2 points if only one specified.