

CS251 Data Structures – Fall 2009
Exam 1 – Review

1. C++
 - (a) `#include` statements, namespaces
 - (b) simple I/O
 - (c) non-reference type objects
 - (d) functions and parameter passing
2. Classes
 - (a) 4 steps: interface; encapsulation; implementation; debug and testing
 - (b) Private vs. public
 - (c) Methods and fields
 - (d) Types of methods
 - (e) Types of files involved
 - (f) Operator overloading
3. Pointers and Dynamic Memory
 - (a) Basic concept and implementation
 - (b) `new` and `delete`
 - (c) Pointers and arrays
 - (d) Dynamic classes
 - i. destructors
 - ii. assignment and copy constructors
4. In-class Labs and Programming Projects
 - (a) Rational class
 - (b) DynArr class
 - (c) Bag class