

CS 311 Data Structures and Algorithms, Fall 2009  
**Quiz 1 Solutions**

Quiz 1 was given in class on Friday, September 11, 2009.

1. [5 pts] You should implement an overloaded operator using a member function, unless you have a good reason not to. Give **two** good reasons.

**Good Reason #1:** To allow for implicit type conversions on the first operand.

This generally applies to the non-modifying arithmetic, comparison, and bitwise operators: +, -, /, %, ==, <, etc.

**Good Reason #2:** When the type of the first operand is something that we cannot modify.

The quintessential examples are stream operators: << and >>. If these were members, then they would have to be members of classes `std::ostream` and `std::istream`, respectively, and we are not allowed to add new members to those classes.