APPENDIX B

Exam Appendix - Java Quick Reference

Accessible methods from the Java library that may be included on the exam

```
class java.lang.Object
• boolean equals(Object other)
  String toString()
class java.lang.Integer
• Integer(int value)
  int intValue()
 Integer.MIN VALUE
                                            // minimum value represented by an int or Integer
 Integer.MAX_VALUE
                                            // maximum value represented by an int or Integer
class java.lang.Double
• Double(double value)
  double doubleValue()
class java.lang.String
• int length()
  String substring (int from, int to) // returns the substring beginning at from
                                            // and ending at to-1

    String substring(int from)

                                           // returns substring(from, length())
                                           // returns the index of the first occurrence of str;
 int indexOf(String str)
                                            // returns -1 if not found
                                            // returns a value < 0 if this is less than other
 int compareTo(String other)
                                            // returns a value = 0 if this is equal to other
                                            // returns a value > 0 if this is greater than other
class java.lang.Math
• static int abs(int x)
  static double abs(double x)
• static double pow(double base, double exponent)

    static double sqrt(double x)

    static double random()

                                            // returns a double in the range [0.0, 1.0)
interface java.util.List<E>
 int size()
   boolean add(E obj)
                                            // appends obj to end of list; returns true

    void add(int index, E obj)

                                            // inserts obj at position index (0 \le index \le size),
                                            // moving elements at position index and higher
                                            // to the right (adds 1 to their indices) and adjusts size
 E get(int index)
• E set(int index, E obj)
                                            // replaces the element at position index with obj
                                            // returns the element formerly at the specified position
• E remove(int index)
                                            // removes element from position index, moving elements
                                            // at position index + 1 and higher to the left
                                             // (subtracts 1 from their indices) and adjusts size
                                             // returns the element formerly at the specified position
```

class java.util.ArrayList<E> implements java.util.List<E>