

## Appendix A — Java Quick Reference

Accessible Methods from the Java Library That May Be Included on the Exam

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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())
• int indexOf(String str) // returns the index of the first occurrence of str;
                           // returns -1 if not found
• int compareTo(String other) // returns a value < 0 if this is less than 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 ≤ index ≤ 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>

```