

# Java Quick Reference

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

Class Constructors and Methods	Explanation
<b>String Class</b>	
<code>String(String str)</code>	Constructs a new <code>String</code> object that represents the same sequence of characters as <code>str</code>
<code>int length()</code>	Returns the number of characters in a <code>String</code> object
<code>String substring(int from, int to)</code>	Returns the substring beginning at index <code>from</code> and ending at index <code>to - 1</code>
<code>String substring(int from)</code>	Returns <code>substring(from, length())</code>
<code>int indexOf(String str)</code>	Returns the index of the first occurrence of <code>str</code> ; returns <code>-1</code> if not found
<code>boolean equals(String other)</code>	Returns <code>true</code> if <code>this</code> is equal to <code>other</code> ; returns <code>false</code> otherwise
<code>int compareTo(String other)</code>	Returns a value <code>&lt;0</code> if <code>this</code> is less than <code>other</code> ; returns zero if <code>this</code> is equal to <code>other</code> ; returns a value <code>&gt;0</code> if <code>this</code> is greater than <code>other</code>
<b>Integer Class</b>	
<code>Integer(int value)</code>	Constructs a new <code>Integer</code> object that represents the specified <code>int</code> value
<code>Integer.MIN_VALUE</code>	The minimum value represented by an <code>int</code> or <code>Integer</code>
<code>Integer.MAX_VALUE</code>	The maximum value represented by an <code>int</code> or <code>Integer</code>
<code>int intValue()</code>	Returns the value of this <code>Integer</code> as an <code>int</code>
<b>Double Class</b>	
<code>Double(double value)</code>	Constructs a new <code>Double</code> object that represents the specified <code>double</code> value
<code>double doubleValue()</code>	Returns the value of this <code>Double</code> as a <code>double</code>
<b>Math Class</b>	
<code>static int abs(int x)</code>	Returns the absolute value of an <code>int</code> value
<code>static double abs(double x)</code>	Returns the absolute value of a <code>double</code> value
<code>static double pow(double base, double exponent)</code>	Returns the value of the first parameter raised to the power of the second parameter
<code>static double sqrt(double x)</code>	Returns the positive square root of a <code>double</code> value
<code>static double random()</code>	Returns a <code>double</code> value greater than or equal to <code>0.0</code> and less than <code>1.0</code>
<b>ArrayList Class</b>	
<code>int size()</code>	Returns the number of elements in the list
<code>boolean add(E obj)</code>	Appends <code>obj</code> to end of list; returns <code>true</code>
<code>void add(int index, E obj)</code>	Inserts <code>obj</code> at position <code>index</code> ( $0 \leq \text{index} \leq \text{size}$ ), moving elements at position <code>index</code> and higher to the right (adds 1 to their indices) and adds 1 to size
<code>E get(int index)</code>	Returns the element at position <code>index</code> in the list
<code>E set(int index, E obj)</code>	Replaces the element at position <code>index</code> with <code>obj</code> ; returns the element formerly at position <code>index</code>
<code>E remove(int index)</code>	Removes element from position <code>index</code> , moving elements at position <code>index + 1</code> and higher to the left (subtracts 1 from their indices) and subtracts 1 from size; returns the element formerly at position <code>index</code>
<b>Object Class</b>	
<code>boolean equals(Object other)</code>	
<code>String toString()</code>	