

Name: _____

Syntax reference (Java)

Declaring variables	Operators	
<pre>boolean a; int b; double c; Object e;</pre>	addition	+
	subtraction	-
	multiplication	*
Assignment	division / quotient	/
<pre>a = true; b = 303; c = 23.28; e = new Object(f, g, h);</pre>	remainder	%
	equal to	==
	not equal to	!=
Calling methods	greater than	>
<pre>c = Math.sqrt(284.8); t = s.substring(3, 5);</pre>	greater than or equal to	>=
	less than	<
Decisions	less than or equal to	<=
<pre>if (condition) { } if (condition) { } else { } if (condition) { } else if (condition) { } ... else { } </pre>	boolean AND	&&
	boolean OR	
	boolean NOT	!
	convert double to int	(int)
	convert int to double	(double)
	Halting	
	return;	
	Returning values from methods	
	return 123;	
	Loops	
	<pre>while (condition) { } do { } while (condition); for (initialization ; condition ; update) { }</pre>	

Name: _____

Syntax reference (Java)

Arrays	Classes
<pre>int[] array; array = new int[439]; int len = array.length; int[][] array2d; array2d = new int[4][3]; int rows = array2d.length; int columns = array2d[0].length;</pre>	<pre>public class SomeClass { int field; // constructor public SomeClass() { field = 12; } public int method() { return field; } }</pre>
Objects	
<pre>SomeClass variable; variable = new SomeClass(); variable.field = 5; int result = variable.method(4);</pre>	

Name: _____

Syntax reference (String methods)

Name	Inputs	Output
charAt	index	character at index
compareTo	another string	positive/negative/zero if this string is after/before/equal to other string
compareToIgnoreCase	another string	positive/negative/zero if this string is after/before/equal to other string, ignoring uppercase/lowercase differences
concat (+)	another string	new string formed from concatenation of this string and other string
endsWith	another string	whether other string is a suffix of this string
equals	another string	whether this and other strings are the same
equalsIgnoreCase	another string	whether this and other strings are the same, ignoring uppercase/lowercase differences
indexOf	another string	leftmost location of other string inside this string, or -1 if not found
indexOf	a character	leftmost location of character inside this string, or -1 if not found
lastIndexOf	another string	rightmost location of other string inside this string, or -1 if not found
lastIndexOf	a character	rightmost location of character inside this string, or -1 if not found
length	none	number of characters in this string
startsWith	another string	whether other string is a prefix of this string
substring	start index, end index (+1)	new string that copies characters from this string, from start index up to but not including end index
substring	start index only	new string that copies characters from this string, from start index up to end of this string
toLowerCase	none	copy of this string in all lowercase
toUpperCase	none	copy of this string in all uppercase
trim	none	copy of this string with leading and trailing spaces removed