

Find a group of 3-4. Use your textbook. If you don't have it, use the Booksite. Once you fill in your row, do the exercise on the right.

data type	literals	operators	comparisons	what do these evaluate to?
int				<pre>int i = 10 i * i + i / i int j = -8 i % 3 i + j j == i i / 3 j / 0</pre>
double				<pre>double x = 10.0 y / 0.0 double y = 3.14159 Math.sqrt(2) * x / 3.0 Math.sqrt(2) 6.02e-23 Math.sqrt(-x)</pre>
boolean				<pre>int i = 0 true false int j = 0 true && false i != j true true false !!!true true && true && false</pre>
char				<pre>char letter = 'a' 'a' + 'b' 'a' + 1 letter == 'q' 'a' < 'b' (char)(letter + 1) 'A' < 'a' (char)(letter + 10)</pre>
String				<pre>"Go" + "Tigers" String c = a "3" + 1 a == b String a = "C"+"OS" b == c String b = "COS" c == a</pre>

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data type	literals	operators	comparisons	what do these evaluate to?
int	126 0 -126	+ - / * %	== != < > <= >=	<pre>int i = 10 i * i + i / i int j = -8 i % 3 i + j j == i i / 3 j / 0</pre>
double	126.0 0.0 -126.0 6.022e23	+ - / * %	< > <= >=	<pre>double x = 10.0 y / 0.0 double y = 3.14159 x / 3.0 Math.sqrt(2) * 6.02e-23 Math.sqrt(2) Math.sqrt(-x)</pre>
boolean	true false	&& !	== !=	<pre>int i = 0 true false int j = 0 true && false i != j true true false !!!true true && true && false</pre>
char	'a' 'Z' '?' <i>(See note below.)</i>	+ - / * % <i>(See note below.)</i>	== != < > <= >=	<pre>char letter = 'a' 'a' + 'b' 'a' + 1 letter == 'q' 'a' < 'b' (char)(letter + 1) 'A' < 'a' (char)(letter + 10)</pre>
String	"Hello, World" "123.3 + 10" "" <i>(See note below.)</i>	+ <i>(See note below.)</i>	none <i>(See note below.)</i>	<pre>"Go" + "Tigers" String c = a "3" + 1 a == b String a = b == c "C"+"OS" c == a String b = "COS"</pre>

- You do **not** have to memorize this chart. You will get much more experience with these data types in the coming weeks. Refer to this page as needed.
- All operators on chars promote chars to ints. For instance, 'a' + 1 is 98. Note, 'a' + 'b' does **not** equal "ab". It's 195, because they are promoted.
- Strings have many more operators and comparisons than listed here. We will learn about them in a couple of weeks. All you need to know for now is +.