



**Problem 3 (20 points)**

The table below contains two columns. The leftmost column is a Java expression. In the rightmost column write the value of the expression as a Java literal. If the value is a double, or boolean or String be sure to use the Java syntax for writing doubles, booleans or Strings. Some of these are tricky, but none require complex arithmetic.

<code>2 + 3 / 4</code>	
<code>2 + (3 / 4)</code>	
<code>(2 + 3) / 4</code>	
<code>("CSCI" + 2) + 2</code>	
<code>"CSCI" + (2 + 2)</code>	
<code>3.0 / 2 * 2</code>	
<code>3 / 2 * 2.0</code>	
<code>5 &lt; 3 &amp;&amp; 3 &lt; 5</code>	
<code>! 5 &lt; 3</code>	
<code>5 % 3</code>	

**Problem 4 (20 points)**

Suppose there is a class named `PlayingCard` with the following constructor

```
public PlayingCard(int v, String s)
```

Create an array called `clubStraightFlush` of five `PlayingCards` where the string is always "club" but the integers are the five integers from 3 to 7. To get full credit for this subproblem, you must use a loop to initialize `clubStraightFlush`.

The `PlayingCard` class also has the following method

```
boolean isAce()
```

Suppose `bigHand` is an array, of unspecified size, of `PlayingCard` objects. Write a loop to set a integer variable `numAces` to the number of aces in `bigHand`.

**Problem 5 (30 points)**

In this problem you are going to write small sections to open two files, one for input and another for output, and then copy words from the input file to the output file.

*Subproblem 5A (15 points)*

Your program should read the file "linein.txt" and write the file "wordout.txt". Start by creating a Scanner object that will read "linein.txt" and a PrintWriter object that can write "wordout.txt". Declare the variable for the Scanner to be scannerIn and the variable for the PrintWriter to be writerOut. If a FileNotFoundException is thrown while creating either of these objects, print an error message that indicates which file open failed.

*Subproblem 5B (15 points)*

Write a loop that reads all the integers stored in the input file and writes them, one per line, into the output file. For example, if the input file contains the two lines:

```
I am taking a 202 exam on 1 October  
in the year 2013
```

then the following three lines should be written to the output file:

```
202  
1  
2013
```