Name (print): ________________________________________

1. (1 point) What punctuation mark distinguishes the end of a statement in Java?

   Solution: ; (semi-colon)

2. (1 point) List one primitive datatype in Java. You may list either the Java syntax or an English equivalent.

   Solution: int, double, float, byte, short, char, etc.

3. (2 points) Write a statement (ie line of Java code) which declares an integer variable named semester and assigns the variable an initial value of 14.

   Solution: int semester = 14;

4. (2 points) Assuming your answer in 2. above was correct, write a statement (ie line of Java code) which changes the value of the variable semester to 22.

   Solution: semester = 22;

5. (6 points) Evaluate the following expressions assuming that the following code has executed:

   int x = 5;
   int y = 2;

<table>
<thead>
<tr>
<th>Expression</th>
<th>Evaluation of expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>x - y</td>
<td></td>
</tr>
<tr>
<td>x / y</td>
<td></td>
</tr>
<tr>
<td>x++</td>
<td></td>
</tr>
</tbody>
</table>
Solution: 3
2 (not 2.5, integer division!)
6

6. (3 points) In your own words, explain why the following Java statement would cause an error. int x = 14.92;

Solution: The variable is an integer (whole number). However, the programmer is trying to assign a floating point (decimal) number (specifically of type double) to the variable. Java doesn’t allow this since the data types don’t match.