Quiz: Operators and Casting

1. (10pts) Which of the following is a unary operator (ie operates on one value or variable)?
   A. subtraction
   B. assignment
   C. multiplication
   D. negation

2. (10pts) What is the value of x after the following code executes? (Show your work after each statement for partial credit.)

   ```java
   double x = 5.0;
   double z = 1.5;
   x = x - 3.9;
   z = x + 2.0;
   x += z;
   x--; 
   ```

3. (10pts) Consider the following variables:
   ```java
   int a = 10;
   int b = 6;
   ```
   What is the value of a/b?
   What is the value of a%b?

4. (20pts) Fill in the table below, considering each line of code separately.

<table>
<thead>
<tr>
<th>Will this line of code cause an error? (yes or no)</th>
<th>If there is an error, correct it and write the correct line of code below.</th>
<th>What is the value of x after the (correct) line of code executes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>int x = 6 + 4.8;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>double x = 9 - 3.7;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>int x = (double) 4.2 + 5;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>int x = (int) 3.6 + 2;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>