1) Write a **SINGLE** statement that declares an array of three integers, initialized to have the values 1, 2, and 4.

2) Write **ONE** expression that represents the sum of the three values in the array you declared above. Your code should work the same even if someone put different values in the array. (i.e. if you write the number 4, you’ve made a mistake)

3) At what index is the number 4 in the array you declared? ______

4) Mark true or false. If the statement is false, change the statement to make it true.

   (a) The following array has 101 elements:
   ```
   int[] x = new int[100];
   ```
   ______

   (b) Java syntax allows programmers to use any expression of the **int** data type as an index. ______

   (c) A Java program, while running, will check to make sure that an array index is valid. ______

   (d) Every array has a length **method** that returns the size of the array.

5) An array has a largest valid index of 50. What is the length of the array? ______

6) Match each part of an array with it’s related city street metaphor

<table>
<thead>
<tr>
<th>array name</th>
<th>actual house</th>
</tr>
</thead>
<tbody>
<tr>
<td>array index</td>
<td>street</td>
</tr>
<tr>
<td>array value</td>
<td>address</td>
</tr>
</tbody>
</table>