Directions: In groups of 2 or 3, using at most one computer, answer the following questions to the best of your combined abilities. When appropriate, show your work, to help us understand your thought process. ICAs (In-Class Activities) count toward your grade; please take them seriously.

Week 11 (2016/11/02)

1. Imagine a method that performs the task of counting the quantity of negative integers in an array. For example, the array shown to the right contains 3 negative values.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>-8</td>
<td>0</td>
<td>-2</td>
<td>-7</td>
</tr>
</tbody>
</table>

   (a) What’s slightly simpler than ... counting the number of negatives in a 5-element array?

   (b) The 5-element array has a range of indexes from 0 through `array.length-1`. The range of indexes from 1 through `array.length-1` has 4 elements. How can we use the count of negative values in the 4-element range of the array to help us count the negatives in the 5-element range of the array?

   (c) What’s the most trivial number of array elements, and how many negatives must it contain?

   (d) Complete the static recursive method `countNegs()`, which accepts two arguments: A reference to an array of `ints`, and the first index of the range of elements to be examined. Thus, to count the negatives in the whole array, the first call to `countNegs()` would be `countNegs(array, 0).

   ```java
   public static int countNegs (int[] array, int startingIndex)
   {
   ```

   When your group is satisfied with your answers, or time is up, hand this to one of the class staff. We’ll review the correct answers after time is up.