Part 2 report:

The insert method:

We added a check for the size of the ArrayList because we want to make sure that there are no elements in the first place.

We used a flag called found in order to check whether an element is already there.

If the element does not belong to the ArrayList, we have two cases: The first case was correctly handled but the second if statement was not enough in the original insert function because it did not compare the element with the next elements in the ArrayList. For example if we add 11 to (5,10). It would create (5,11,10). Which means the ArrayList will not be sorted. For that reason, we modified the second if statement in a way that adds the new element to the next index and it does NOT BREAK so that the same comparison runs for the next elements.

The insert method has been tested in the SetInsetTest.java test class.

The member method:

This method did not have any bugs and we teste dit in SetMemberTest.java test class.

The section method:

This method had a bug and it did not remove more than one element. We took off the i++ statement from the first if condition. The tests are run using SetSectionTest.java test class.

The containsArithTriple method:

This method did not contain all the cases, so we added an ArrayList that does not contain the element get(i) for every i. That way, we make sure that equation is checked for every two elements. We tested this method with the SetArithTest.java test class.