Unit 6 – Worksheet 03 Insertion Sort Name: _____

**Consider the following array initialization: int[ ] arrayOfHope = {19, 61, 78, 13, 42, 28, 33}**

1. How many passes would a selection sort require to guarantee the array was in order?
2. How many passes would an insertion sort require to guarantee the array was in order?
3. Show the complete process that a selection sort would follow to sort the data (show each pass):

4. Show the complete process that an insertion sort would follow to sort the data (show each pass):

5. Consider the integers 7, 2, and 4. There are six total ways (different orders the numbers can be listed) to create an array using these three integers. List these six arrays.

   int[ ] array1 =

   int[ ] array2 =

   int[ ] array3 =

   int[ ] array4 =

   int[ ] array5 =

   int[ ] array6 =

6. Show the complete process for an insertion sort on the above 6 arrays (noting which pass you could stop on):

   array1 array2 array3 array4 array5 array6