Unit 7 Assessment Notes Document

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|  | Insert | Append |
| tinyArray | 4.9 μs | 7.9 μs |
| smallArray | 12.7 μs | 8.1 μs |
| mediumArray | 166.4 μs | 61.8 μs |
| largeArray | 9.1811 ms | 522.3 μs |
| extraLargeArray | 885.4976 ms | 2.8915 ms |

The insert function scales quadratically, this makes sense because unshift causes a reindexing of the array. Append increases linearly, this make sense because it is just impacted by the number of arguments put in, it only adds the numbers to the end of the array rather than impacting every single item in the array. I would say that the appending function scales better, you always want to plan for the worst-case scenario and any amount of large data will slow the insert function down as shown above.

Extra Credit: Unshift is slower because it places values at the beginning of the array, causing a reindexing of the rest of the array.