

Runtime Assessment Notes

	tiny	small	medium	large	extraLarge
Insert	35.6 μ s	44.3 μ s	153.5 μ s	6.654 ms	629.0297 ms
Append	63.9 μ s	73.7 μ s	101.3 μ s	401.4 μ s	2.4177 ms

Both functions scale differently. It looks like the append (.push) has a complexity of $O(1)$ and insert (.unshift) has a scaling of $O(n)$. This is because unshift has to go through the whole array and put the new elements at the beginning, where push only has to throw them at the end of the array instead of moving every index of the array every time. Based on this test it appears that, in general, the append (.push) method scales much better especially as the numbers get bigger. Once the test reached a medium number the append method was significantly faster after the numbers increased in size and by the time we put in an extra large number the append method was much, much faster than the insert method.