

Step One:

Timing Results for the tinyArray

insert 3.666 μ s

append 4.084 μ s

Timing Results for the smallArray

insert 6.542 μ s

append 4.625 μ s

Timing Results for the mediumArray

insert 100.708 μ s

append 30.666 μ s

Timing Results for the largeArray

insert 770.510458 ms

append 1.834 μ s

Timing Results for the extraLargeArray

insert 770.781833 ms

append 1.8775 ms

The unshift time for tinyArray from insert to push is a small difference.

The small array time from insert to push was lower when it was appended(push).

The medium array time from insert to push is a $\frac{1}{4}$ less at append. Medium appears to have the best scalability.

The large array has a much larger difference from unshift to append.

The extra large array has the largest difference from insert to push.