## Insertion Sort – Ascending Initialization

- The 11 data points indicate an linear relationship O(n) between list length and sorting time. The linear trendline fits the data with an R<sup>2</sup> value of .9999.
- Prediction for the time required for Insertion
  Sort to sort an ascending (pre-sorted) list of length 10,000,000,000:
  y(1000000000)=29.9997 seconds

