

## Insertion Sort – Descending Initialization

- The 11 data points indicate an  $O(n^2)$  relationship between list length and sorting time. The quadratic trendline fits the data with an  $R^2$  value of .9999.
- Prediction for the time required for Insertion Sort to sort a descending (reverse sorted) list of length 10,000,000:  $y(10000000)=99970.2137$  seconds or 27.77 hours

