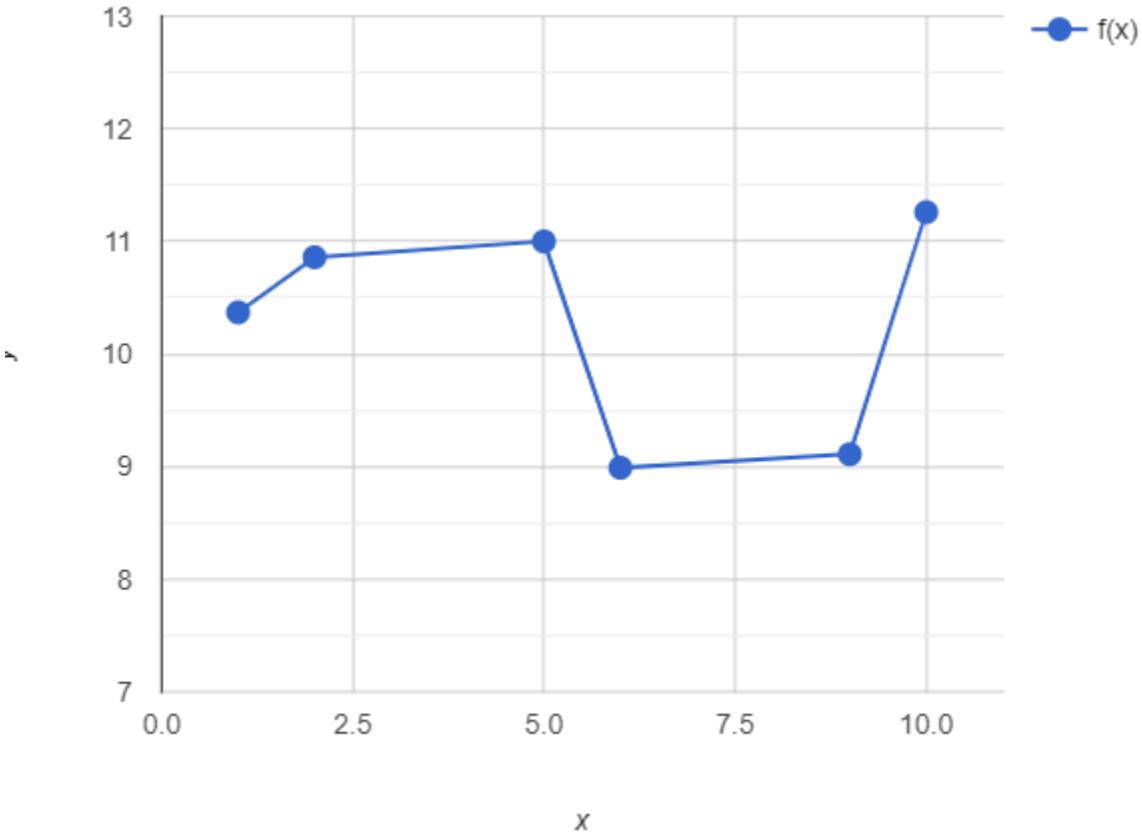
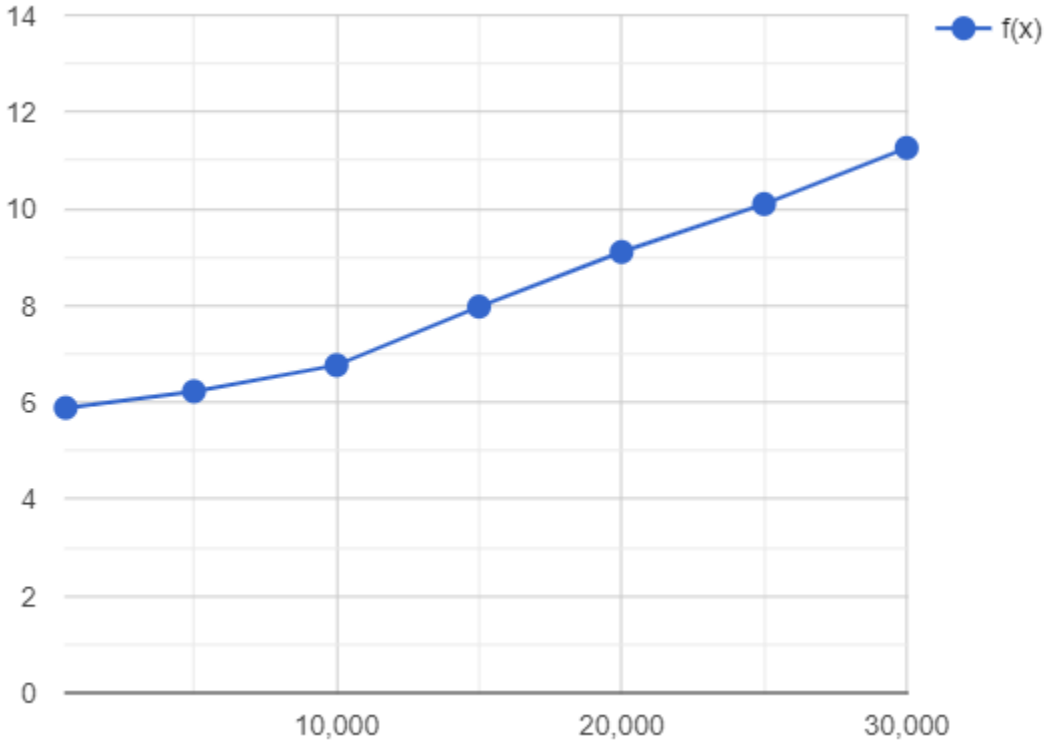
Aaron Occhipinti

A3

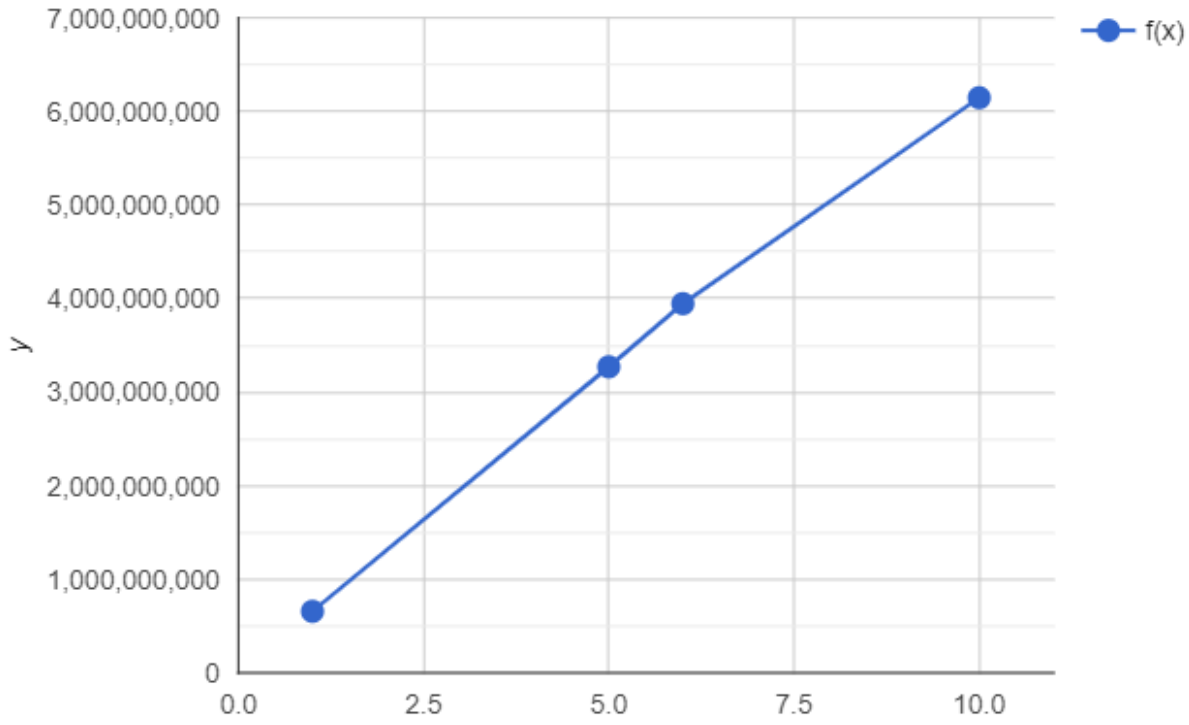
1.) The maximum matrix dimensions would be constrained by the amount of memory available over the 10 nodes. Although running this program with an N value of around 50000 or more would take an extreme amount of time to compute.
2.) For the graph X axis is the number of nodes and f(x) axis is total program runtime in seconds.



3.) For the graph X axis is size of matrix and f(x) axis is time for program to complete.



4.) The following graph shows the FLOPS of the program on the f(x) axis, and the X axis is the number of ranks



(FORMAT)[NUMRANKS – FLOPS ;]
10 - , 6146242596.250158; 6 - 3945405335.295117 ; 5 - 3270444520.077929 ; 1 - 657412554.529024