Muller’s method works by starting with an initial guess of some points along the given function. It takes these points to interpolate a parabola that traces the function along that interval. Then, a modified quadratic formula is used to compute the roots of the parabola. The modification of the quadratic formula is done to minimize loss of significant digits. Once the roots are computed, the maximal root is chosen. At the end, we relabel the initial guess points such that the computed point becomes the last guess for the next iteration and the second guess from the previous becomes the first for the next. I.E

Iteration 0: p0, P1, P2 are the starting values used to compute p. If the desired precision is not reached, P0 = P1, P1 = P2, and P2 = P. Then the algorithm starts over again.

The benefit of this method is that it allows us to approximate complex roots for our function.