Suppose integers \( n \geq 1 \) and \( \sigma \geq 2 \) are given, together with \( n \) distinct points \( z_1, \ldots, z_n \), in the complex plane. Define \( \Phi_M = \Phi_M(\sigma; z_1, \ldots, z_n) \) to be the class of rational functions

\[
\phi_{p,q}(z) = \frac{g_p(z)}{h_q(z)}
\]

(where \( g \) and \( h \) are polynomials of degree \( p \) and \( q \), respectively) such that \( \phi \) when iterated converges with order \( \sigma \) at each \( z_i \), \( i = 1, \ldots, n \). Then if \( M < \sigma n \), \( \Phi_M \) is null; if \( M = \sigma n \), \( \Phi_M \) contains exactly \( \sigma n \) elements. For every \( p + q + 1 = M \), we show how to construct all the elements of \( \Phi_M \) by expressing, for each choice of \( p \) and \( q \) which satisfies \( p + q + 1 = M \), the coefficients of \( g_p \) and \( h_q \) in terms of arbitrarily chosen values. In fact, these coefficients are expressed in terms of generalized Newton sums

\[
S_{j,k}^n = S_{j,k}^n(z_1, \ldots, z_n), \quad 1 \leq j \leq n, \quad k \geq n
\]

which we show may be calculated by recursion from the normal Newton sums \( S_{j,k}^n \). Hence, given a polynomial \( f_n(z) \) with \( n \) distinct (unknown) zeros \( z_1, \ldots, z_n \), we may construct all \( \phi_{p,q}(z) \) which converge to the \( z_i \) with order \( \sigma \) in the case \( \sigma = 2 \), the choice \( p = n \), \( q = n - 1 \), yields the Newton-Raphson iteration

\[
\phi_{n,n-1} \in \Phi_{2n}
\]

yields the Schröder and König iterations are shown to be elements of \( \Phi_{n,n-1} \) and \( \Phi_{2(n-1)(n-1)+2} \), respectively. We show by example that there exist cases in which \( \Phi_{2n} \) has an undesirable property (attractive cycles) not shared by other iterating functions in the same class.