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Title: On the zeros of reciprocal polynomials

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The purpose of this paper is to study reciprocal polynomials whose zeros are located in certain subsets of the complex plane. Of particular interest are the half planes $\Re z < 0$, $\Re z > 0$, the positive and negative half-lines and the unit circle. Our main tool is the Chebyshev transform (see, e.g., LAKATOS [8]) and a Viéta-like formula for reciprocal polynomials (see LOSONCZI [12]). Using these, we find necessary conditions, in some cases necessary and sufficient conditions for the reciprocal polynomials to have their zeros in the above sets.

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