

1163-30-1690

Taylor Poe*. *Poncelet Quadrilaterals Four Ways*.

A consequence of Poncelet's theorem states that given any two points in the unit disk, one can find an ellipse with these points as foci circumscribed by infinitely many quadrilaterals, each of which is inscribed in the unit circle. We will connect this beautiful geometric fact with numerical ranges of matrices, finite Blaschke products, orthogonal polynomials on the unit circle, and Mirman's iterations. (Received October 13, 2020)