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*The number of real ovals of a cyclic cover of the sphere.*

A compact Riemann surface  $X$  which is a cyclic cover of degree  $n$  of the Riemann sphere has a defining equation of the form  $y^n = f(x)$  where  $f$  is a complex polynomial. If  $f$  has real coefficients then complex conjugation  $\sigma$  leaves  $X$  invariant. The fixed point set of  $\sigma$  in  $X$  consists of a disjoint union of simple closed curves, called *ovals*. In this paper we determine a procedure to count the exact number of ovals of  $\sigma$  in terms of the multiplicities of the real roots of  $f$ . (Received August 09, 2015)