1116-30-852   **Stephanie Edwards*** (`sedwards@hope.edu`), **Sarah Hilsman** and **Anna Snyder**. *Level curves of real algebraic functions and theorem of Pólya.* Preliminary report.

We consider an old theorem of G. Pólya's which looks at the level curves of real algebraic functions and the intersection of such curves with lines of positive slope. We modify Pólya's theorem, relaxing conditions on the functions and also considering intersections with lines of negative slope. We look at some specific examples for lower degree polynomial functions. (Received September 14, 2015)