1106-05-2547   **Steven Michael Senger*** (`stevensenger@missouristate.edu`). *Value sets of functions with finite domain, with applications to planar functions.*

By relating the number of images of a function with finite domain to a certain parameter, we obtain both an upper and lower bound for the image set. Even though the arguments are elementary, the bounds are, in some sense, best possible. These bounds are then applied in several contexts. In particular, we obtain the first non-trivial upper bound for the image set of a planar function over a finite field. (Received September 16, 2014)