1096-13-2637   **Bryan C White*** (`bcwhite64@gmail.com`). *Computational investigation of star operations with Macaulay 2.*

We investigate the actions of star operation of the form $J^\star = (I : (I : J))$ for some fixed fractional ideal I on numerical semigroup rings using the computer program Macaulay 2. We do this by representing our numerical semigroup ring as a quotient of a polynomial ring in several variables and then applying the colon function in Macaulay. We also find limitations on possible actions of arbitrary star operations using the fact that if a fractional ideal A is $\star$-closed, then so is $(A : B)$ for any fractional ideal B. (Received September 17, 2013)