Jeffrey W Lyons* (jlyons3@citadel.edu) and Jeffrey T. Neugebauer. Existence of a Positive Solution for a Singular Fractional Boundary Value Problem with Fractional Boundary Conditions using Convolution and Lower Order Problems.

Existence of a positive solution is shown for two singular two-point fractional boundary value problems with fractional boundary conditions using fixed point theory, lower order problems, and convolution of Green’s functions. A nontrivial example is included. (Received August 18, 2020)