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**Tuwaner Hudson Lamar\*** (tlamar@morehouse.edu), Morehouse College, 830 Westview Drive, S.W., Atlanta, GA 30314. *Analysis of a  $2n$ -th Order Differential Equation with Lidstone Boundary Conditions - The Existence of Positive Solutions.*

The existence of positive solutions is established for a class of even order differential equations with even order boundary conditions. Exact and time dependent solutions are analyzed for the case  $n = 2$ . The theory of the existence of positive solutions for all  $n$  is proven using a method that shows the associated integral operator for the differential equation has a fixed point.

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