



LEWIS AND CLARK COLLEGE  
Department of Mathematical Sciences

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PUZZLE OF THE WEEK (3/9/2017 - 3/15/2017)

Find, with proof, all continuously differentiable functions  $f(x)$  of real variable  $x$  for which  $f(0) = 0$  and

$$|f'(x)| \leq |f(x)| \quad \text{for all real } x.$$

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- The only correct solutions of the Puzzle of the Week #7 were submitted by Leo DiGiosia, David Lovitz and Fisher Ng. Congratulations!
  - One possible complete solution of the Puzzle #7 is posted online. (Look for the Puzzle of the Week announcements on the departmental web-page.)
  - Solvers should include their full name and some kind of a contact information. Solutions should be submitted to **Iva Stavrov** in BoDine 305; email submissions are encouraged (istavrov at lclark). Solutions should be received by the end of the day on **March 15th, 2017**.