Problem 1 (due Monday, Feb. 17)

a) Is there a one-to one and onto function \$f: (0,1)\longrightarrow (0,1)\$ such that \$f'=f^{-1}\$, i.e. the derivative of \$f\$ equals the inverse of \$f\$?

b) Is there a one-to one and onto function \$f: (0,\infty)\longrightarrow (0,\infty)\$ such that \$f'=f^{-1}\$, i.e. the derivative of \$f\$ equals the inverse of \$f\$?

This problem was solved by only one participant: Yuqiao Huang. The submitted solution has been essentially the same as our "in-house" solution. To see the solution and some related open questions click the following link Solution

From:

 $https://www2.math.binghamton.edu/-\textbf{Department of Mathematics and Statistics, Binghamton}\\ \textbf{University}$

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