Problem Set 1

Saturday, August 25, 2018 5:03 PM

Problem 1 (5 points) Solve $x' = ax$ by separation of variables to get that $x = ke^{at}$ for some k.

Problem 2 (5 points) Use separation of variables to solve $x' = ax(1-x)$ and then impose the initial condition $x(0) = u$ to get $x = u/(u+(1-u)e^{-at})$

Problems from the book

2 (a) & (d) (5 points)

3(b), 5, 10 (5 points each)