## Math 54 Handout 18

July 31, 2018

## Question 1.

Find a general solution to the differential equation

1. 
$$x' = \begin{pmatrix} 0 & 1 \\ -1 & 2 \end{pmatrix} x.$$
  
2.  $x' = \begin{pmatrix} 0 & 0 & 1 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} x.$