## Homework 2

Use eigenvalues and eigenvectors to solve the system of differential equations.

$$
\begin{array}{ll}
x_{1}^{\prime}= & -3 x_{2}+5 x_{3} \\
x_{2}^{\prime}= & -4 x_{1}+4 x_{2}-10 x_{3} \\
x_{3}^{\prime}= & 4 x_{3}
\end{array}
$$

