R. Bruner Math 2150, Fall 2006, Quiz 10 November 15, 2006

The eigenvalues of $\begin{bmatrix} 2 & 4 \\ 3 & 1 \end{bmatrix}$ are $\lambda_1 = -2$ and $\lambda_2 = 5$. (You do not need to check this.) Find the general solution to the differential equation

$$x' = \left[\begin{array}{cc} 2 & 4 \\ 3 & 1 \end{array} \right] x.$$