Math 365: Honors Analysis I

Name:\_\_\_\_\_

**Quiz 5** December 1, 2000

Find the general solution to each of the following systems of equations.

1. 
$$\mathbf{X}' = \begin{pmatrix} 1 & -1 \\ 5 & -3 \end{pmatrix} \mathbf{X}$$

$$2. \ \mathbf{X}' = \left(\begin{array}{cc} 3 & -4 \\ 1 & -1 \end{array}\right) \mathbf{X}$$

3. 
$$\mathbf{X}' = \begin{pmatrix} 2 & -1 \\ 3 & -2 \end{pmatrix} \mathbf{X} + \begin{pmatrix} e^t \\ t \end{pmatrix}$$