

Math 325: Differential Equations Name: _____

Quiz 6 *March 2, 2001*

You may use your own calculator. You may not use anything else. You may not pass a calculator to another person.

Show all your work. Erase or cross out any work you do not want graded.

Solve:

$$\mathbf{x}' = \begin{bmatrix} 29 & 1 & 0 \\ 0 & 29 & 0 \\ 0 & 0 & -2001 \end{bmatrix} \mathbf{x}, \quad \mathbf{x}(0) = \begin{bmatrix} -\sqrt{243} \\ 2^\pi \\ 7^{37} \end{bmatrix}.$$