

Math 202-08 Quiz 5

Name:.....ID:.....

Exercise:

1) Find the eigenvalues and all eigenvectors of the matrix A ,

$$A = \begin{pmatrix} 1 & 1 & 0 \\ -1 & 1 & 0 \\ 0 & 0 & 2 \end{pmatrix}$$

2) Find a fundamental matrix $\phi(t)$ for the system

$$\frac{dX}{dt} = AX$$