Quiz 10

Name:

1. Use Gauss-Jordan reduction to compute the inverses of the following matrices:

$$A = \begin{pmatrix} -1 & 2 & 3 \\ 1 & 1 & 1 \\ 1 & 0 & 3 \end{pmatrix} \quad \text{and} \quad B = \begin{pmatrix} 2 & -1 & 2 \\ 0 & 1 & -1 \\ 0 & 0 & 3 \end{pmatrix}.$$

2. Compute the eigenvalues and eigenvectors of the following matrices:

$$A = \begin{pmatrix} 3 & -1 \\ -2 & 2 \end{pmatrix}$$
 and $B = \begin{pmatrix} 2 & -1 & 2 \\ 0 & 1 & -1 \\ 0 & 0 & 3 \end{pmatrix}$.