

Name:

1. Find all eigenvalues and eigenvectors for the following matrix.

$$A = \begin{pmatrix} -4 & -6 & 3 \\ 2 & 4 & -2 \\ -2 & -2 & 1 \end{pmatrix}$$

2. Find all eigenvalues and eigenvectors for the following matrix.

$$B = \frac{1}{3} \begin{pmatrix} 4 & -1 & -1 \\ 0 & 6 & 0 \\ -2 & -10 & 5 \end{pmatrix}$$