## MATH 369 Homework 9

Due: Tuesday April 16th, in class.

1. Find the coordinates/coefficients of

$$\mathbf{w} = \begin{pmatrix} 2 \\ -4 \end{pmatrix}$$

in terms of the basis

$$\mathbf{w} = \begin{pmatrix} 2 \\ -4 \end{pmatrix}$$

$$\mathbf{u}_1 = \begin{pmatrix} 3 \\ 8 \end{pmatrix} \quad \text{and} \quad \mathbf{u}_2 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}.$$

- 2. #21 in Section 4.4.
- 3. #14 in Section 4.5
- 4. #17 in Section 4.5.
- 5. #3 in Section 4.7.