

# MATH 2P12, Fall, 2018

## ASSIGNMENT #3

*Due 4 pm. Friday, Nov. 9, 2018*

1. Let  $R^3$  have the Euclidean inner product. For which values of  $k$  are  $\mathbf{u}$  and  $\mathbf{v}$  orthogonal, where  $\mathbf{u} = (k, k, 1)$  and  $\mathbf{v} = (k, 5, 6)$ ?

**The following questions are from the text book (11th edition):**

Section 5.2 #7, 9.

Section 6.1 #1 (a), (b) (d), 10, 17, 28(a).

Section 6.2, # 2(c), 5, 11, 38.

Section 6.3, # 7, 26, 29.

Section 4.6, # 2.

Section 7.1, # 3(a).

Section 8.1, # 6, 7 (a), 21 (hint: read example 10 on page 451 in text book).

**Additional Practice Exercises. Not To Be Submitted.**

Section 5.2 #3, 10, 15, 17 20(a).

Section 6.1, # 2, 5, 8, 13, 27.

Section 6.2, # 2(b), 6, 12, 37.

Section 6.3, # 8, 25, 30.

Section 4.6, # 1.

Section 7.1, # 4.

Section 8.1, # 5, 7(b), 12, 13, 22.