

MATH 3130-300
Introduction to Linear Algebra
Week 7

Daily Homework

Date	Section	Assignment
7/17	6.1	1, 2, 10, 14, 15, 16, 20, 21, 25, 30
7/18	6.2	1, 4, 8, 11, 12, 24, 25, 28
7/19	6.3	1, 4, 7, 12, 19, 22, 23, 24
7/20	6.4	3, 4, 5, 7, 9, 10, 13, 14, 17, 19, 20
7/21	6.5	2, 3, 5, 7, 9, 10, 13, 17, 19, 20, 21

Weekly Homework (Due 7/21)

1. Let $A = \begin{bmatrix} -4 & 3 \\ -10 & 7 \end{bmatrix}$. Calculate A^k .
2. Let $\{\mathbf{v}_1, \dots, \mathbf{v}_n\}$ be an orthogonal set of nonzero vectors in \mathbb{R}^m , and let c_1, \dots, c_n be nonzero scalars. Show that $\{c_1\mathbf{v}_1, \dots, c_n\mathbf{v}_n\}$ is an orthogonal set of vectors.