

Math 430 Fall 2016 Homework #8

Due Nov. 1st, Tue in class

1. Textbook, Section 5.1, page 276: 5, 6;
2. Textbook, Section 5.4, page 303: 1(a, d), 2;
3. Let $x, y \in \mathbb{R}^n$. Show that $\|x + y\|_2^2 = \|x\|_2^2 + \|y\|_2^2$ if and only if x is orthogonal to y (i.e. $x^T y = 0$).