Homework 17: Orthogonal Bases and Gram-Schmidt Orthogonalization

Assignments should be **stapled** and written clearly and legibly.

- 1. $\S6.2, \#39, 41, 42$.
- 2. §6.3, #10, 14, 37, 42(b), 43

Note. For problem 42(b), you should use the fact that the Legendre polynomials are orthogonal with respect to the inner product given in the first sentence of Example 9.