MATH 350 Linear Algebra
Homework 3

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Book Problems

- (12 points) §1.6, Problem 1 (1 point per part) No proofs needed, but you should have a proof in mind!)
- (14 points) §2.1, Problems 2, 3, 27(a), 27(b), 27(c), 27(d), 42(a) (2 points each)
- (2 points) §2.2, Problem 2(a)

Additional Problems

- (2 points) Let V be a vector space, and let $B := \{v_1, \ldots, v_n\}$ be a basis. Let $W \subset V$ be a subspace. Must there exist a subset $S \subset B$ such that S is a basis for W? (If yes, prove the result. If no, give a counterexample.)