

MATH 121

HOMEWORK 2, DUE SEPTEMBER 17

Part I

- (1) Axler, page 35, Problem 1.
- (2) Axler, page 35, Problem 2.
- (3) Axler, page 35, Problem 4.
- (4) Axler, page 35, Problem 6.
- (5) Axler, page 35, Problem 8.
- (6) Axler, page 35, Problem 9.

Part II

- (7) Axler, page 35, Problem 11.
- (8) Axler, page 35, Problem 13.
- (9) Axler, page 35, Problem 14.
- (10) Axler, page 35, Problem 16.
- (11) Axler, page 35, Problem 17.
- (12) Show that the vector space F^S of all functions from the set S to the field F is finite dimensional if and only if the set S is finite.