# Notes on "Finite-Dimensional Vector Spaces" by Paul R. Halmos

#### September 19, 2022

Each \section corresponds to the scope of one member's assignment, and each \subsection corresponds to one theorem or exercise in the textbook, specified in the format m.n where m is the section number and n is the theorem/exercise number. If n is not given, we use n=1 instead.

## 1 Toga (2022/09/19)

#### 1.1 Exercise 1.1

(a) Since addition is commutative,  $0+\alpha=\alpha+0$  holds. We also have  $\alpha+0=\alpha$  by definition, hence  $0+\alpha=\alpha$ .

### 2 Mohehe

#### 2.1 Exercise 1.1

- (b)
- (c)
- (d)
- (e)
- (f)
- (g)