

FUNCTIONS

The first goal of this chapter is to provide a review of functions. In our study of algebraic structures in later chapters, functions will provide a way to compare two different structures. In this setting, the functions that are one-to-one correspondences will be particularly important.

The second goal of the chapter is to begin studying groups of permutations, which give a very important class of examples. When you begin to study groups in Chapter 3, you will be able draw on your knowledge of permutation groups, as well as on your knowledge of the groups \mathbf{Z}_n and \mathbf{Z}_n^\times .