1 Main Text

Here is the main discussion of functions, domains, and ranges.

Definition 1.1

Given two sets A and B, a function from A to B is a rule or mapping that takes each element $x \in A$ and associates with it a single element of B. The set A is called the domain of f. The range of f is not necessarily equal to B, but refers to the subset of B given by $\{y \in B : y = f(x) \text{ for some } x \in A\}$.

Definition 1.2

Given two sets A and B, a function from A to B is a rule or mapping that takes each element $x \in A$ and associates with it a single element of B. The set A is called the domain of f. The range of f is not necessarily equal to B, but refers to the subset of B given by $\{y \in B : y = f(x) \text{ for some } x \in A\}$.

Appendix: Definitions