1. A function is a relationship between input and output. In a function, the output depends on the input. There is exactly one output for each input.

2. A function is a relation in which each element of the domain is paired with exactly one element of the range.

3. A function is a set of ordered pairs (or number pairs) that satisfies this condition: There are no two ordered pairs with the same input and different outputs.

4. A real-valued function is defined on a set D of real numbers is a rule that assigns to each number x in D exactly one real number, denoted by f(x).

5. A function is a rule that assigns to element of a set A a unique element of a set B (where B may or may not equal A).

6. A function is a mapping or correspondence between one set called the domain and a second set called the range such that for every member of the domain there corresponds exactly one member in the range.

7. One quantity, H, is a function of another, t, if each value of t has a unique value of H associated with it. We say H is the value of the function or the dependent variable, and t is the argument or independent variable. Alternatively, think of t as the input and H as the output.