

## Chapter 1 Worksheet:

Assigned problems: Exercises pp. 39-40, #2a, 9, 10, 11, 13, 18, 23, 25, 36, 39, (quiz Thursday, 8/23).

I. Describe the following concepts important for functions:

- A. domain
- B. range
- C. composition
- D. periodicity
- E. symmetry

II. Give examples as follows:

A.  $f$  and  $x / f(x + 2) \neq f(x) + 2$

B.  $x$  and  $y / |x + y| \neq |x| + |y|$

C.  $x / -x > x$

III. Give the graph of a function  $f(x)$  on the real numbers, we translate its graph up 1 unit by plotting the function  $f(x) + 1$ . Describe how to translate it by 1 unit

- right,
- left,
- and down.

