## I. Square Roots (pp.502-503):

- 1. If "x" is any number, then the notation  $\sqrt{x}$  represents the "square root"
- 2. If  $x = n^2$ , then  $n = \sqrt{x}$
- $3. \left(\sqrt{x}\right)^2 = \underline{\hspace{1cm}}$
- 4.  $\sqrt{x^2} =$ \_\_\_\_
- 5. Examples (p.511): Exercises #4,6,10,16,18

## II. Square Root function (pp.503-504):

- 1. Graph of  $f(x) = \sqrt{x}$  see Figure 7.1
- 2.  $D = \{x \mid x \ge 0\}$
- 3. Domain of  $\sqrt{g(x)}$  is  $\{x \mid g(x) \ge 0\}$
- 4. Examples (p.511): Exercises #22,28,32

## III. More about $\sqrt{x}$

- 1.  $\sqrt{\phantom{a}}$  symbol is the radical sign, "x" is the "radicand"
- 2. If  $x \le 0$ , then...
  - a.  $\sqrt{x}$  is not a real #
  - b.  $\sqrt{x^2} = |x|$
- 3. Examples (p.512): Exercises #36,38,42,44

HW: pp.511-513 / Exercises #1-45(odd) Read pp.515-521 (section 7.2)