Pre-Calculus 30 **Chapter 2 Review**

Base Radical Function: $y = \sqrt{x}$ has the following characteristics:

- left endpoint at (0, 0)
- no right endpoint
- shape of half a parabola

Graph $y = a\sqrt{b(x-h)} + k$ by transforming $y = \sqrt{x}$ using the parameters *a, b, h*, and *k*.

Key values to consider when graphing $y = \sqrt{x}$ and $y = \sqrt{f(x)}$ are $f(x) = 0$ and $f(x) = 1$. (These are invariant points.)

Domain of $y = \sqrt{f(x)}$: all values in the domain of *f(x)* for which $f(x) \geq 0$ is defined

Range of $y = \sqrt{f(x)}$: the square roots of all values in the range of *f(x)* for which *f(x)* is defined

Solving Radical Equations algebraically

Solutions/Roots of Radical Equations are the x-intercepts of the graphs of the corresponding radical function.

Assignment: Page 99 #2 – 5, 7 – 10ab, 12, 13a, 16 (algebraic only)