

Unit # 1 – Solving Quadratic Equations: Part II (By Square Roots)

Simplifying Radicals – Square Roots

- square root (of a number) → If have $a^2 = b$, then _____ because _____



- **radicand** – represents the _____ Ex: $\sqrt{4}$ where _____
- **index number** – represents the _____ Ex: \sqrt{x} where index = _____
- Notes: 1.) You can have a _____ (called the _____)
 2.) You can have a _____ where _____
 3.) (Normally) You have a _____ where a _____ symbol is used
 4.) (Occasionally) You can have a _____ where answer is _____
- GOAL to simplifying square roots – _____
 where the easiest way to do this is by _____ using a _____

Example 1: Simplify each radical (square root) completely.

a.) Simplify: $\sqrt{18}$

b.) Simplify: $\sqrt{27}$

c.) Simplify: $\sqrt{360}$

d.) Simplify: $5\sqrt{48}$

e.) Simplify: $-3\sqrt{32}$

f.) Simplify: $3\sqrt{5} \cdot 2\sqrt{10}$

