

Algebra II – Day 43

Formative Ticket

Solving Radical Equations

Examples of Solving Radical Equations

- **Fact One: Radical must be alone before you apply the inverse operation.** – Before you raise both sides of an equation to a power, you must isolate the radical.
- **Fact Two: Always check for extraneous solutions.** – Extraneous solution may exist with radical equations. When we take the square root of a real number, we only want the **principal square root** which **CANNOT** be negative. Therefore, you must check your solutions to determine if extraneous solutions exist.

1. $2\sqrt{x+1} = 14$	2. $6 + \sqrt[3]{y-4} = 9$	3. $(3x-1)^{\frac{1}{5}} = 2$
4. $\sqrt{x+18} = x-2$	5. $\sqrt{y+2} = \sqrt{2y+5}$	6. $\sqrt{m+23} = 2\sqrt{m+11}$