**How do we solve radical equations?**

1.) \_\_\_\_\_\_\_\_\_\_\_\_ the radical on one side of the equation.

2.) Raise **\_\_\_\_\_\_\_\_\_\_\_\_\_** of the equation to the nth power.

*(nth power = \_\_\_\_\_\_\_ value)*

3.) Simplify and solve.

4.) Check your solution(s) for extraneous solutions.

**\*Solutions that cause the equation to be \_\_\_\_\_\_\_\_.**

**\*Can only occur when your index is \_\_\_\_\_\_\_ and the isolated radical equals a \_\_\_\_\_\_\_\_\_\_\_ number.**

**\*If your only solution is extraneous, then there is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**Examples: Solve. Check for extraneous solutions.**

|  |  |
| --- | --- |
| 1.) | 2.) |
| 3.) | |

**How do we solve equations with rational exponents?**

1.) Isolate the on one side of the equation.

2.) Raise **BOTH SIDES** of the equation to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of rational exponent.

3.) Simplify and solve.

4.) Check your solution(s) for extraneous solutions.

**\*Can only occur if your denominator is EVEN and the isolated (\_\_\_) equals a \_\_\_\_\_\_\_\_\_ number.**

**Examples: Solve. Remember to check for extraneous solutions.**

|  |  |
| --- | --- |
| 4.) | 5.) |