

SOLVING EQUATIONS CONTAINING
RADICALS

Radical Equations: Equations with variables in the radicand

You will need to:

- 1) Isolate the radical on one side of equation if possible
 - 2) Raise both sides to a power equal to the index sometimes more than once!
- This will remove the radical and give a solution.

*In doing so, sometimes the solution is

extraneous

(does not satisfy the original equation).

***Therefore, you must check all possible solutions the original equation and discard any extraneous solutions.

Solve $5 = \sqrt{x-2} - 1$

27. Solve: $\sqrt{x-15} = 3 - \sqrt{x}$

41. Solve: $(4z - 1)^{\frac{1}{5}} - 1 = 2$

45. Solve: $\sqrt[3]{4n - 8} - 4 = 0$