Checking Answers

Example   **Solve** $\sqrt[3]{3x-9} - 2 = -4$

$\sqrt[3]{3x-9} = -2$ **Isolate radical**

$3x - 9 = -8$ **Cube both sides**

$3x = 1$

$x = 1/3$

Example   **Solve** $\sqrt{x^2 - 8}$ = 2 – x

$x^2 – 8 = 4 – 4x + x^2$ **Square both sides**

–12 = – 4x

3 = x

Check your answer. 3 does not work

What that means is there is no real value of x that will satisfy the original equation. We say the answer is the null set or empty set.

We write it this way ∅