UNIT 3 LESSON 4 SOLVING RADICAL EQUATIONS

Steps to solving radical equations:

1. Isolate the radical
2. Square or Cube each side
3. Check your answers for extraneous solutions (solutions that do not work)

Solve each equation below.

1) $\sqrt{x+2}+2=5$

2) $\sqrt{2x+1}=3$

3) $\sqrt{5-x}-3=0$

4) $\sqrt{x-4}=-5$

5) $4+\sqrt[3]{x-6}=2$

6) $\sqrt[3]{x}=4$

7) $\sqrt{2x+15}=x$

8) $\sqrt{x+16}=x+4$

9) $\sqrt{3x+2}=3x$

10) $\sqrt{6x+1}=2x+1$

11) $\sqrt[3]{x+1}=\sqrt[3]{x^2-5}$

12) $\sqrt{2-x}=x-2$

13) $\sqrt{x^2-1}=\sqrt{5x-5}$

14) $\sqrt[3]{(x-4)^2}=1$