## Algebra 1

Our Goal: To learn to solve square root equations

Warm Up: Have your homework out for checking, please

**Today's Homework:** 

10.3 Textbook Exercises, p.564: 4-34 (evens)

<u>Previous Homework</u>

None

$$V = \frac{4}{3} \text{TI}^{3}$$
 $C = \frac{3}{4} \text{TI}^{4}$ 



## **Squaring Each Side of an Equation**

Words If two expressions are equal, then their squares are also equal.

**Algebra** If a = b, then  $a^2 = b^2$ .

Solve each equation.

$$\sqrt{x} + 5 = 13$$



**b.** 
$$3 - \sqrt{x} = 0$$

Solve the equation. Check your solution.

**1.** 
$$\sqrt{x} = 6$$

**2.** 
$$\sqrt{x} - 7 = 3$$

**3.** 
$$\sqrt{y} + 15 = 22$$

**4.** 
$$1-\sqrt{c}=-2$$

Solve the equation.

$$4\sqrt{x+2} + 3 = 19$$

$$4\sqrt{x+2} = 16$$

$$\sqrt{x+2} = 16$$

Solve 
$$\sqrt{2x-1} = \sqrt{x+4}$$
.

$$(\sqrt{2X-1})^2 = (\sqrt{X+4})^2$$

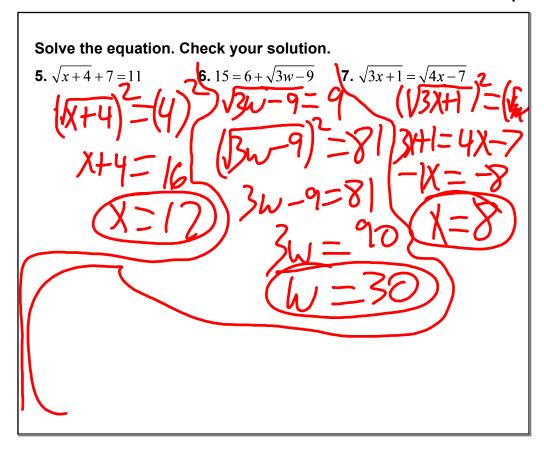
$$2X-1 = X+4$$

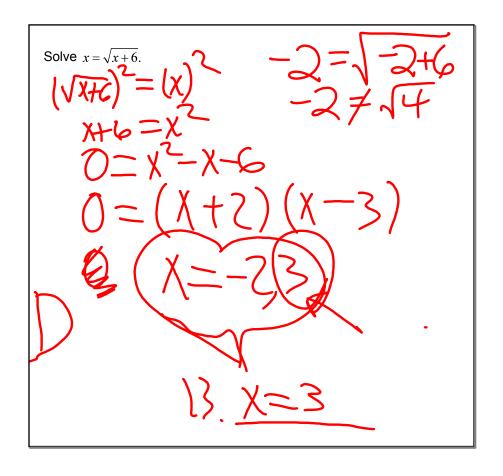
$$2X-X = 4+1$$

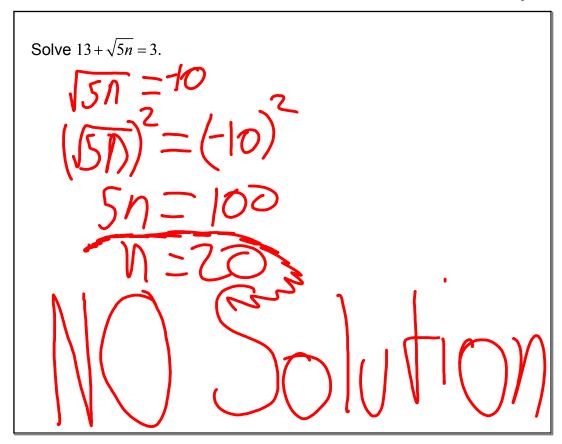
$$3X = 5$$

$$X = 5$$

$$X = 5$$







Solve the equation. Check your solution(s).

8. 
$$\sqrt{4-3}x = x$$
 $\sqrt{y+3}x = x$ 
 $\sqrt$