

## Math 2 Unit 3.6 Practice Solve Radical Equations

Period \_\_\_\_\_

**Solve each equation. Remember to check for extraneous solutions.**

1)  $\sqrt{k} = 3$

{9}

2)  $7 = \sqrt{m + 6}$

{43}

3)  $\sqrt{p} = \sqrt{2p - 10}$

{10}

4)  $\sqrt{n} = \sqrt{20 - n}$

{10}

5)  $\sqrt{x} = \sqrt{2x - 8}$

{8}

6)  $\sqrt{18 - k} = \sqrt{\frac{k}{2}}$

{12}

7)  $\sqrt{60 - r} = \sqrt{\frac{r}{5}}$

{50}

8)  $\sqrt{3n - 12} = \sqrt{23 - 2n}$

{7}

9)  $\sqrt{6 - x} = x$

{2}

10)  $\sqrt{110 - n} = n$

{10}

$$11) v = \sqrt{42 - v}$$

{6}

$$12) \sqrt{-56 + 15v} = v$$

{8, 7}

$$13) \sqrt{72 - n} = n$$

{8}

$$14) x = \sqrt{-10 + 7x}$$

{5, 2}

$$15) 6 + \sqrt{31 - 6a} = a$$

No solution.

$$16) -7 = \sqrt{5n - 41} - n$$

{9, 10}

$$17) \sqrt{41 - 2x} = x - 3$$

{8}

$$18) x - 1 = \sqrt{-4x}$$

No solution.

$$19) \sqrt{7b - 54} = b - 6$$

{10, 9}

$$20) 3 = \sqrt{9b - 2} - \sqrt{3 - b}$$

{2}

$$21) \sqrt{3x - 5} - 1 = \sqrt{2 - x}$$

{2}

$$22) 3 + \sqrt{2k - 2} = \sqrt{8k + 1}$$

{3, 1}

$$23) \sqrt{7 - 2r} - \sqrt{-1 - 2r} = 2$$

{-1}

$$24) 1 = \sqrt{1 - 4n} - \sqrt{10 - n}$$

{-6}