

## Radical Equations - Part 2

Solve each equation. Remember to check for extraneous solutions.

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

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

3)  $\sqrt{30 - x} = x$

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

5)  $x = \sqrt{42 - x}$

6)  $\sqrt{12 - r} = r$

7)  $\sqrt{4n} = n$

8)  $\sqrt{5v} = v$

9)  $r = \sqrt{10r}$

10)  $m = \sqrt{56 - m}$

11)  $b = \sqrt{-4 + 4b}$

12)  $r = \sqrt{8r}$

13)  $\sqrt{-16 + 10a} = a$

14)  $r = \sqrt{-1 - 2r}$

$$15) \sqrt{-45 + 14n} = n$$

$$16) x = \sqrt{110 - x}$$

$$17) \sqrt{9n} = n$$

$$18) x = \sqrt{40 - 3x}$$

$$19) \sqrt{90 - n} = n$$

$$20) x = \sqrt{-70 + 17x}$$

$$21) \sqrt{4n + 8} = n + 3$$

$$22) -n + \sqrt{6n + 19} = 2$$

$$23) 4 + \sqrt{-3m + 10} = m$$

$$24) x - 5 = \sqrt{x + 1}$$

$$25) n - 7 = \sqrt{3n - 21}$$

$$26) b - 6 = \sqrt{18 - 3b}$$

$$27) -3 + \sqrt{m + 59} = m$$

$$28) \sqrt{7a - 54} - a = -6$$

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

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{1}

3)  $\sqrt{30 - x} = x$   
{5}

4)  $x = \sqrt{8x}$   
{0, 8}

5)  $x = \sqrt{42 - x}$   
{6}

6)  $\sqrt{12 - r} = r$   
{3}

7)  $\sqrt{4n} = n$   
{0, 4}

8)  $\sqrt{5v} = v$   
{0, 5}

9)  $r = \sqrt{10r}$   
{0, 10}

10)  $m = \sqrt{56 - m}$   
{7}

11)  $b = \sqrt{-4 + 4b}$   
{2}

12)  $r = \sqrt{8r}$   
{0, 8}

13)  $\sqrt{-16 + 10a} = a$   
{2, 8}

14)  $r = \sqrt{-1 - 2r}$   
No solution.

$$15) \sqrt{-45 + 14n} = n$$
$$\{5, 9\}$$

$$16) x = \sqrt{110 - x}$$
$$\{10\}$$

$$17) \sqrt{9n} = n$$
$$\{0, 9\}$$

$$18) x = \sqrt{40 - 3x}$$
$$\{5\}$$

$$19) \sqrt{90 - n} = n$$
$$\{9\}$$

$$20) x = \sqrt{-70 + 17x}$$
$$\{7, 10\}$$

$$21) \sqrt{4n + 8} = n + 3$$
$$\{-1\}$$

$$22) -n + \sqrt{6n + 19} = 2$$
$$\{5\}$$

$$23) 4 + \sqrt{-3m + 10} = m$$
$$\text{No solution.}$$

$$24) x - 5 = \sqrt{x + 1}$$
$$\{8\}$$

$$25) n - 7 = \sqrt{3n - 21}$$
$$\{10, 7\}$$

$$26) b - 6 = \sqrt{18 - 3b}$$
$$\{6\}$$

$$27) -3 + \sqrt{m + 59} = m$$
$$\{5\}$$

$$28) \sqrt{7a - 54} - a = -6$$
$$\{9, 10\}$$