

Radical Equations

Solve each equation. Remember to check for extraneous solutions. Determine restrictions on variables.

1) $\sqrt{x} = 10$

2) $10 = \sqrt{\frac{m}{10}}$

3) $\sqrt{v-4} = 3$

4) $6 = \sqrt{v-2}$

5) $\sqrt{n} = 9$

6) $5 = \sqrt{x+3}$

7) $2 = \sqrt{4b}$

8) $\sqrt{n+9} = 1$

9) $-8 + \sqrt{5a-5} = -3$

10) $10\sqrt{9x} = 60$

11) $1 = \sqrt{x-5}$

12) $-10\sqrt{v-10} = -60$

$$13) 10 + \sqrt{10m - 1} = 13$$

$$14) -12 = -6\sqrt{b + 4}$$

$$15) \sqrt{v + 3} - 1 = 7$$

$$16) 90 = 9\sqrt{25v}$$

$$17) \sqrt{\frac{x}{10}} = \sqrt{3x - 58}$$

$$18) \sqrt{3n + 12} = \sqrt{n + 8}$$

$$19) \sqrt{72 - x} = \sqrt{\frac{x}{5}}$$

$$20) \sqrt{x + 3} = \sqrt{1 - x}$$