

1. Before squaring each side of a radical equation, what step should be taken first?

Choose the correct answer below.

- A. Solve the equation.
- B. Collect all variable terms on one side of the equation.
- C. Isolate one of the radicals on one side of the equation.
- D. Raise each side of the equation to a power.

2. Solve. If the equation has no real solution, so state.

$$\sqrt{5x+4} = 7$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- A.  $x = \square$  (Simplify your answer. Use a comma to separate answers as needed.)
- B. There is no real solution.

3. Solve the radical equation. Check your solution(s).

$$\sqrt{5x-6} - 7 = 0$$

Select the correct choice below and fill in any answer boxes present in your choice.

- A.  $x = \square$  (Use a comma to separate answers as needed.)
- B. There is no solution.

4. Solve the radical equation. Check your solution(s).

$$y + 1 = \sqrt{9y - 5}$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

- A.  $y = \square$   
(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)
- B. There is no solution.

5. Solve the radical equation. Check your solution(s).

$$3x = \sqrt{8x + 1}$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

- A.  $x =$    
(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)
- B. There is no solution.

6. Solve the radical equation. Check your solution(s).

$$3 = 9 + \sqrt{5x + 6}$$

Select the correct choice below and fill in any answer boxes present in your choice.

- A.  $x =$   (Use a comma to separate answers as needed.)
- B. There is no solution.

7. Solve the radical equation. Check your solution(s).

$$y - \sqrt{y - 8} = 10$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

- A.  $y =$    
(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)
- B. There is no solution.

8. Solve the radical equation. Check your solution(s).

$$\sqrt{y + 8} - 8 = y$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

- A.  $y =$    
(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)
- B. There is no solution.

9. Solve the radical equation. Check your solution(s).

$$x - 3\sqrt{x-4} = 4$$

Select the correct choice below and fill in any answer boxes present in your choice.

- A.  $x =$   (Use a comma to separate answers as needed.)
- B. There is no solution.

10. Solve the radical equation. Check your solution(s).

$$\sqrt{7x^2 - x} = x$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

- A.  $x =$    
(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)
- B. There is no solution.

11. Solve the radical equation. Check your solution(s).

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

Select the correct choice below and fill in any answer boxes present in your choice.

- A.  $x =$   (Use a comma to separate answers as needed.)
- B. There is no solution.

12. Solve the following radical equation. Check your solutions.

$$\sqrt{6x+1} = 1 + \sqrt{4x}$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

- A.  $x =$    
(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)
- B. There is no solution.

13. Solve the radical equation. Check your solutions.

$$\sqrt{x+6} = 1 + \sqrt{x+1}$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

A.  $x =$

(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)

B. There is no solution.

14. Solve the following radical equation. Check your solutions.

$$\sqrt{2x+25} - \sqrt{x+1} = 4$$

Select the correct choice below and, if necessary, fill in the answer box within your choice.

A.  $x =$

(Use a comma to separate answers as needed. Type an integer or a simplified fraction.)

B. There is no solution.