

Solving Radical Equations Bell Work

1. Complete the following statements.

- a. A radical equation is an equation that contains a radical expression with a variable in the _____.
- b. The first step of solving radical equation is _____.

2. Which equation is radical equation?

- a. $2x = 24$
- b. $6\sqrt{x} = 5$
- c. $5x + 2 = 7$
- d. $\frac{1}{2}x^2 = \sqrt{2}$

3. Write T for true or F for false.

- a. $\sqrt{5} - 2 = x$ is radical equation
- b. $\sqrt{x+2} - 2 = 4$ is not radical equation
- c. $4 - x + \sqrt{x} = 9$ is radical equation

4. Underline the equation that is equivalent to $\sqrt{x+1} = 5$

- a. $\sqrt{x+1} = 10$
- b. $\sqrt{x+2} = 6$
- c. $\sqrt{x+1} + 3 = 8$

5. Underline the equation that is equivalent to $2\sqrt{x} - 1 = x + 5$

- a. $x\sqrt{2} = x + 5$
- b. $\sqrt{x-1} = x + 5$
- c. $2\sqrt{x} = x + 6$

Solving Radical Equations Bell Work

ANSWERS

1. Complete the following statements.

- a. A radical equation is an equation that contains a radical expression with a variable in the **radicand**.
- b. The first step of solving radical equation is **isolation of radical term**.

2. Which equation is radical equation?

- a. $2x = 24$
- b. **$6\sqrt{x} = 5$**
- c. $5x + 2 = 7$
- d. $\frac{1}{2}x^2 = \sqrt{2}$

3. Write T for true or F for false.

- d. $\sqrt{5} - 2 = x$ is radical equation **F**
- e. $\sqrt{x+2} - 2 = 4$ is not radical equation **F**
- f. $4 - x + \sqrt{x} = 9$ is radical equation **T**

4. Underline the equation that is equivalent to $\sqrt{x+1} = 5$

- a. $\sqrt{x+1} = 10$
- b. $\sqrt{x+2} = 6$
- c. **$\sqrt{x+1} + 3 = 8$**

5. Underline the equation that is equivalent to $2\sqrt{x} - 1 = x + 5$

- a. $x\sqrt{2} = x + 5$
- b. $\sqrt{x-1} = x + 5$
- c. **$2\sqrt{x} = x + 6$**