

## Extraneous Solutions

1.  $\sqrt{(x+5)^2} = x+5$

Which of the following values of  $x$  is NOT a solution to the equation shown?

- A)  $-6$
- B)  $-4$
- C)  $-2$
- D)  $0$

2.  $\sqrt{(x)^4} = 4$

What are all possible solutions to the given equation?

- A)  $-2$  only
- B)  $2$  only
- C)  $-2$  and  $2$
- D)  $-4$  and  $4$

3.  $x-1 = \sqrt{-x+7}$

Which of the following values of  $x$  is a solution to the equation above?

- A)  $-3$
- B)  $-2$
- C)  $1$
- D)  $3$

4.  $x-3 = \sqrt{x+17}$

What are all values of  $x$  that satisfy the given equation?

- I.  $-1$
- II.  $8$

- A) I only
- B) II only
- C) I and II
- D) Neither I nor II

5. What is the set of all solutions to the equation

$$\sqrt{2x+3} = -x ?$$

- A)  $\{-1, 3\}$
- B)  $\{-1\}$
- C)  $\{3\}$
- D) There are no solutions to the given equation.