

Section 2.4 Solving Linear Equations in One Variable Using the Addition-Subtraction Principle

1. If I add 3 to a number and the result is 12, what number did I start with?

- (a) 3
- (b) 9
- (c) 12
- (d) 15

2. If I subtract 5 from a number and the result is 6, what number did I start with?

- (a) 1
- (b) 5
- (c) 6
- (d) 11

3. Solve for x : $x + 7 = 8$

- (a) $x = 1$
- (b) $x = 7$
- (c) $x = 8$
- (d) $x = 15$

4. Solve for t : $t - 2 = 10$

- (a) $t = 2$
- (b) $t = 8$
- (c) $t = 10$
- (d) $t = 12$

5. True or False: The solutions to $x+3 = 7$ are the same as the solutions to $x+3-3 = 7-3$.
- (a) True, and I am very confident
 - (b) True, but I am not very confident
 - (c) False, but I am not very confident
 - (d) False, and I am very confident
6. True or False: The solutions to $y - 8 = 20$ are the same as the solutions to $y - 8 + 8 = 20 - 8$.
- (a) True, and I am very confident
 - (b) True, but I am not very confident
 - (c) False, but I am not very confident
 - (d) False, and I am very confident
7. What is the solution set: $2(x - 3) = 5x - 3(x + 2)$?
- (a) $\{0\}$
 - (b) $\{6\}$
 - (c) $\{12\}$
 - (d) $\{\text{all real numbers}\}$
 - (e) no solution
8. **True or False:** $5(3x - 2) = 5$ and $3(5x - 2) = 9$ are equivalent equations.
- (a) True, and I am very confident
 - (b) True, but I am not very confident
 - (c) False, but I am not very confident
 - (d) False, and I am very confident
9. Nadia gives Amy \$3. If Amy now has \$17, how much money did Amy start with? Set up and solve an equation.
- (a) \$3
 - (b) \$14
 - (c) \$17
 - (d) \$20