

## Algebra I

## 3.5 Worksheet #3

## Addition and Subtraction Equations

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Hour: \_\_\_\_\_

Use the Addition and Subtraction Properties of Equality to solve each equation.

Show your work. Box and check your solutions.

1.  $p - 34 = -8$

2.  $4.5 = r - 3.8$

3.  $x - 11 = -5$

4.  $\frac{5}{8} = y - \frac{3}{4}$

5.  $x + 2 = 8$

6.  $x + 3 = -25$

7.  $x + 1\frac{1}{2} = -19\frac{1}{2}$

8.  $x + 6.26 = 7.26$

9.  $5 = x + 1$

10.  $x + \frac{1}{5} = \frac{3}{10}$

11.  $x - 3 = 41$

12.  $x - 3.6 = 7$

13.  $y - \frac{3}{4} = \frac{1}{8}$

14.  $2x - (x + 1) = 9$

15.  $8 - z = 10$

16.  $2x + 2 - (x - 2) = 3$

**Write an equation** to describe each situation then use the Addition and Subtraction Properties of Equality to solve each equation. Show your work. Box and check your solutions.

1. In 12 years, Ian will be 27 years old. How old is he now? Let  $x$  = Ian's current age.
2. Seven years ago, Lila was nine years old. How old is she now? Let  $x$  = Lila's current age.
3. 25 less than a number is 47. What is the number? Let  $x$  = the number.
4. The sum of a number and  $-15$  is  $-72$ . What is the number? Let  $x$  = the number.
5. The temperature was  $25^{\circ}\text{F}$  yesterday and now it is  $-12^{\circ}\text{F}$ . Let  $c$  be the change in temperature. By how much has the temperature changed?
6. Two children wish to buy a \$50 present for their parents. If one child has saved \$5, how much does the other child need to have saved? Let  $x$  = the amount the other child needs to have saved.
7. If the temperature is  $-11^{\circ}\text{C}$ , by how much must it increase to become  $13^{\circ}\text{C}$ ?  
Let  $x$  = increase in temperature.