

Solving & Writing Equations**Practice: Solving Equations**

Solve each equation using its inverse operation and the property of equality. Show your work.

1. $x + 18 = 34$ $x =$ _____

7. $8a = \frac{4}{9}$ $a =$ _____

2. $y - 15 = 9$ $y =$ _____

8. $10g = \frac{4}{6}$ $g =$ _____

3. $7k = 84$ $k =$ _____

9. $n + 6.3 = 9.1$ $n =$ _____

4. $\frac{m}{6} = 13$ $m =$ _____

10. $p - 8.5 = 2.7$ $p =$ _____

5. $\frac{2}{3} + s = \frac{5}{6}$ $s =$ _____

11. $3.2d = 40$ $d =$ _____

6. $j - \frac{2}{5} = \frac{1}{10}$ $j =$ _____

12. $\frac{3w}{4} = 15$ $w =$ _____

Practice: Writing & Solving Equations

Write and solve an algebraic equation for each problem. Show your work.

1. When a number is doubled, the result is 48. What is the number?

2. After students borrowed 28 novels from the school library, there were 35 novels left. How many novels were in the school library at first?

3. In a swimming class, $\frac{2}{5}$ of the participants are girls. There are 24 boys in the class. Find the total number of participants in the class.

4. When a number is tripled and 8 is subtracted from the result, the answer is 16. What is the number?
5. The difference of two numbers is 117. The greater number is 4 times the other number. What is the smaller number?
6. Jason's age is 3 times Shauna's present age. In 4 years, the sum of their ages will be 56 years. Find the present ages of Jason and Shauna.
7. For every 15 students on a field trip, there needs to be one teacher. How many teachers are needed for a group of 100 students?

Apply: Writing & Solving Equations

Problem 1. A box of pencils contains y green, 8 blue, and 10 red pencils.

- A. Write two equivalent expressions to show the total number of pencils in 5 boxes.

_____ and _____

- B. There are a total of 130 pencils in 5 boxes. Write two equivalent equations to show this.

_____ and _____

- C. Solve the equation to find how many green pencils are in each box.
