

Paper Practice 2.3

Solving Multi-Step Equations

Use properties of equality to solve each equation. Check your solution.

1. $5c + 3 = 18$

2. $9w + 8 = -1$

3. $43 = 8z + 11$

4. $\frac{y}{3} + 5 = 14$

5. $\frac{x}{4} + 18 = 9$

6. $\frac{h}{-3} + 7 = 8$

7. $12 = \frac{4-a}{2}$

8. $\frac{5+m}{6} = 4$

9. $\frac{18-p}{-4} = -4$

10. **PHOTOGRAPHY** A photographer sells his photographs for \$20 each at an art show. He spent \$185 to print the photographs and made a profit of \$55 at the art show. Write and solve an equation to find p , the number of photographs sold.

11. **BOWLING** Brooke went bowling with her friends. She bowled 3 games, and her average score for those games was 121. She had 117 her first game and 108 her second game. Write and solve an equation to find g , the score of her third game.

Solve each equation for x . Assume $a \neq 0$.

12. $ax + 5 = 13$

13. $ax - 9 = 15$

14. $7 = 4 - ax$

15. $3 = \frac{5}{ax} + 5$