

Name _____

Hour _____

2-4**Practice**

Form G

Solving Equations With Variables on Both Sides**Solve each equation. Check your answer.**

1. $3n + 2 = -2n - 8$

2. $8b - 7 = 7b - 2$

3. $-q - 11 = 2q + 4$

4. $17 - 9y = -3 + 16y$

Write and solve an equation for each situation. Check your solution.

5. Shirley is going to have the exterior of her home painted. Tim's Painting charges \$250 plus \$14 per hour. Colorful Paints charges \$22 per hour. How many hours would the job need to take for Tim's Painting to be the better deal?

6. Tracey is looking at two different travel agencies to plan her vacation. ABC Travel offers a plane ticket for \$295 and a rental car for \$39 per day. M & N Travel offers a plane ticket for \$350 and a rental car for \$33 per day. What is the minimum number of days that Shirley's vacation should be for M & N Travel to have the better deal?

Solve each equation. Check your answer.

7. $-(5a + 6) = 2(3a + 8)$

8. $3w - 6 + 2w = -2 + w$

9. $-8x - (3x + 6) = 4 - x$

Determine whether each equation is an *identity* or whether it has *no solution*.

10. $-2(j - 3) = -2j + 6$

11. $5x + 2x - 3 = -3x + 10x$

12. $-(3z + 4) = 6z - 3(3z + 2)$