

## 2-4 Solving Equations with Variables on Both Sides ~ Notes

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### A. Steps

1. Just working with one side of the equation at a time, simplify (Distribute → Combine Like Terms).
2. Eliminate the term with the variable on one of the sides of the equal sign (before dealing with constants).
3. Solve.

### B. Examples: Solve.

1.  $-5x + 9 = -3x + 1$

2.  $14 + 7n = 14n + 28$

3.  $22(g - 1) = 2g + 8$

4.  $-d + 12 - 3d = 5d - 6$

5.  $4(m - 2) = -2(3m + 3)$

6.  $-(4y - 8) = 2(y + 4)$

7.  $5a - 2(4a + 5) = 7a$

8.  $11w + 2(3w - 1) = 15w$

9.  $4(3 - 5p) = -5(3p + 3)$