

## Chapter 4 Section 4: Solving Equations with Variables on Both Sides

### Problems

*Solve.*

1.  $2x - 80 = x + 21$

\_\_\_\_\_

2.  $8y - 14 = 7y - 86$

\_\_\_\_\_

3.  $4z + 27 = 2z - 87$

\_\_\_\_\_

4.  $4t + 22 = 10t - 14$

\_\_\_\_\_

5.  $-10u + 6 = 4u + 34$

\_\_\_\_\_

6.  $-3v + 9 = 2v - 16$

\_\_\_\_\_

7.  $-5w + 34 = 8w + 73$

\_\_\_\_\_

8.\*  $-8x + 15 = -2x + 75$

\_\_\_\_\_

9.  $-7m - 16 = -3m - 24$

\_\_\_\_\_

10.  $-p - 7 = -4p - 19$

\_\_\_\_\_

11.  $-8q - 12 = -10q - 12$

\_\_\_\_\_

12.  $11m = 5 - 18 - 2m$

\_\_\_\_\_

13.  $k - 9k + 18 = k$

\_\_\_\_\_

14.  $s - 18 - 5s = 8s + 18$

\_\_\_\_\_

15.  $x + 6 = -6 - 4x - 8$

\_\_\_\_\_

16.  $8x + 5 - 4x = 6x - 9$

\_\_\_\_\_

17.  $9n - 5 = 3n + 4n - 59$

\_\_\_\_\_

18.  $13 - 8d + 21 = -9 - 9d$

\_\_\_\_\_

19.  $a + 6 - 17 = -5a - 10 - 19$

\_\_\_\_\_

20.  $-7x - 15 + 3x = 35 - 4x - 10x$

\_\_\_\_\_

21.  $8f - 2f + 25 = -9f - 82 - 28$

\_\_\_\_\_

22.  $g + 14 - 9g = -7g + 29 - 7$

\_\_\_\_\_

23.  $x - 9 - 11x + 18 = -3x + 27$

\_\_\_\_\_

24.  $5k + 14 = 8k + 32 - 6k + 15$

\_\_\_\_\_

25.  $-4y - 6 - 13 - 7y = -7 - 10y + 18$

\_\_\_\_\_

26.  $20c - 5c - 3 = -7 + 4c - 9 - 2c$

\_\_\_\_\_

27.  $2x - 80 + 17x + 9 = -21 + x + 5x + 2$

\_\_\_\_\_

28.  $3u - 7u - 8 - 5u = -35u + 70 + 4u + 9u$

\_\_\_\_\_

29.  $r - 25 - 32 + 9 = 18r - 6 - 19r + 5r$

\_\_\_\_\_

30.  $6v + 12 - 4v + 7 = -4 - 8v - 40 + 3v$

\_\_\_\_\_