

Name: _____ Date: _____ Per: _____

Solving Equations with Variables on Both Sides

3.4 Practice 3

Solve each equation, then check your solution.

1. $5x - 3 = 13 - 3x$

2. $-4c - 11 = 4c + 21$

3. $1 - s = 6 - 6s$

4. $14 + 5n = -4n + 17$

5. $\frac{1}{2}k - 3 = 2 - \frac{3}{4}k$

6. $\frac{1}{2}(6 - z) = z$

7. $3(-2 - 3x) = -9x - 4$

8. $4(4 - w) = 3(2w + 2)$

9. $\frac{5}{2}t - t = 3 + \frac{3}{2}t$

10. $9(4b - 1) = 2(9b + 3)$

11. $3(6 + 5y) = 2(-5 + y)$

12. $\frac{2}{3}x - \frac{1}{6} = \frac{1}{2}x + \frac{5}{6}$

13. $6 + 2(3j - 2) = 4(1 + j)$

14. $-5x - 10 = 2 - (x + 4)$

15. $\frac{1}{2}(3g - 2) = \frac{g}{6}$

3.4 Practice 3

16. $1.4f + 1.1 = 8.3 - f$

17. $\frac{1}{9}(2m - 16) = \frac{1}{3}(2m + 4)$

18. $2 - \frac{3}{4}z = \frac{1}{8}z + 9$

19. $\frac{1}{3}(c + 1) = \frac{1}{6}(3c - 5)$

20. $2(a - 8) + 7 = 5(a + 2) - 3a - 19$

21. $3(d - 8) - 5 = 9(d + 2) + 1$

22. $\frac{1}{4}(5 - 2h) = \frac{h}{2}$

23. Two third of a number reduced by 11 is equal to 4 more than the number. Find the number.

24. Five times the sum of a number and 3 is the same as 3 multiplied by 1 less than twice the number. What is the number?

25. Tripling the greater of two consecutive even integers gives the same result as subtracting 10 from the lesser even integer. What are the integers?

26. The formula for the perimeter of a rectangle is $P = 2l + 2w$, where l is the length and w is the width. A rectangle has a perimeter of 24 inches. Find its dimensions if its length is 3 inches greater than the width.