NAME _____ DATE _____ PERIOD _____

3-5 Practice

Solving Equations with the Variable on Each Side

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

10. $3(6 + 5y) = 2(-5 + 4y)$

11. $-5x - 10 = 2 - (x + 4)$

12. $6 + 2(3j - 2) = 4(1 + j)$

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

14. $1.4f + 1.1 = 8.3 - f$

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

16. $2 - \frac{3}{4}z = \frac{1}{8}z + 9$

All work on looseleaf.

Yes, you have to do your checks.

Be careful in #11, distribute the negative by multiplying each term in parentheses by -1 -- this is the only way to get these terms out of parentheses jail.

For #5, clear the fractions by multiplying both sides by 4. For #6, clear the fraction by multiplying both sides by 2. For #13, clear the fractions by multiplying both sides by 2. For #15, clear the fractions by multiplying both sides by 6. For #16, clear the fractions by multiplying both sides by 8. Do you get the idea of how to clear out fractions in an equation?

Follow your sign rules!

When changing a flat tire, loosen the lug nuts before jacking up the car.

Mr. C.