

Name: _____ Date: _____

Solve each of the following equations. If the equation is an identity, write "all real numbers." If the equation is a contradiction, write "no solution." If the equation has one solution only, check that solution.

1. $2(x - 5) + 9 = 2x + 1$

2. $5x - 9 - 3(x + 1) = 2x - 12$

3. $\frac{3}{5}(x - 10) = 12$

4. $-3x - 9(x + 2) = -18$

5. $10x - 15 + 3(x - 2) = 13x + 400$

6. $-5(10 - 2x) + 6(x - 1) = 4(4x - 14)$

7. $\frac{2}{3}x + 5 - \frac{4}{3}x - 4 = 1$

8. $-2x = -19(x - 1) - 19$

9. $15 - 7x + 2(3x - 4) = 8 - x$