Algebra **Name:** _____

Solving Equations **Period:**_____

Steps for Solving Equations

1. Remove Parenthesis
2. Combine Like Terms (on both sides of equal sign)
3. Move variable to one side
4. Undo Addition and/or Subtraction
5. Undo Multiplication and/or Division

** If the variable cancels out, the equation will either be an Identity (meaning that its true for ALL values of the variable), or it will have No Solution.

Stuff I'm supposed to know….

1. $\frac{1}{6} \cdot 48 =$ _____

2. $\frac{2}{3} \cdot \frac{6}{7} =$ _____

3. $\frac{3}{8} \cdot 8 =$ _____

4. $\frac{2}{5}(15m + 2) =$ _____

5. $\frac{3}{4}(12m - 8) =$ _____

6. $\frac{1}{4}(8m - 16) =$ _____

Solve. SHOW WORK!

7. $3x = 18$

8. $3w + 10 = 22$

9. $-8m = 32$

10. $\frac{4}{5}m = 8$

11. $2m - 6 = 10$

12. $\frac{2}{3}x = 8$

13. $2x = 2x + 1$

14. $3x - 9 = 3(x - 3)$

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

16. $-5 = \frac{1}{3}m + \frac{2}{9}m$

17. $9x - 6 - 12x + 5 = -7 - 4x$

18. $2(5x + 4) = 3(2x + 1) + 4x$

19. $10 = \frac{-m}{5} + 2$

20. $-6p + 9 - p = -4p - 3 - 3p + 12$

21. $8m + 2(m + 4) = 5(m - 4)$

22. $3x + 12 = 3x - 8$

23. $-0.38 + 5.6m = 0.18$

24. $\frac{1}{3}(9m + 12) = m - 12$