Principles of Algebra   Name/Date __Clee /Today_____

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 2C.2 – More Combining Like Terms

#1-10, Simplify each expression.

1. $9a + 10(6a - 1) + 2a - 12$

$= 9a + 60a - 10 + 2a - 12$

$= \boxed{71a - 22}$

2. $-9(6m - 3) + 6(1 + 4m) - (5 - m)$

$= -54m + 27 + 6 + 24m - 5 + 1m$

$= \boxed{-29m + 28}$

3. $-10(1 - 9x) + 4x + 6(x - 10) + 20$

$= -10 + 90x + 4x + 6x - 60 + 20$

$= \boxed{-50 + 100x}$

4. $5(-2n + 4 - 3p) - 2(6p - 3n + 1) + 10n$

$= -10n + 20 - 15p - 12p + 6n - 2 + 10n$

$= \boxed{6n + 18 - 27p}$

5. $-3(5b^2 + 4) + (b^2 + 2) - b^2$

$= -15b^2 - 12 + b^2 + 2 - b^2$

$= \boxed{-15b^2 - 10}$

6. $-(5 - 3w) + (8w + 1) - 2(-6w + 4)$

$= -5 + 3w + 8w + 1 + 12w - 8$

$= \boxed{-12 + 23w}$

7. $4x^3 - 2(3x^3 + 5x^2) + 6x - (9x^2 + 2x^3)$

$= 4x^3 - 6x^3 - 10x^2 + 6x - 9x^2 - 2x^3$

$= \boxed{-4x^3 - 19x^2 + 6x}$

8. $8abc - 12abc^5 + 3abc - 4ab^5c + 8abc^5$

$= \boxed{11abc - 4abc^5 - 4ab^5c}$

9. $(10mn^2 - 4m^2n) - 4(-m^2n + 5mn^2)$

$= 10mn^2 - 4m^2n + 4m^2n - 20mn^2$

$= \boxed{-10mn^2}$

10. $\frac{5}{6}(18z^3 - 12z^2) - \frac{3}{4}(16z^2 - 20z^3) + 8z^3$

$= 15z^3 - 10z^2 - 12z^2 + 15z^3 + 8z^3$

$= \boxed{38z^3 - 22z^2}$