

## Unit 5, Day 0, Day Of HW: Distributive Property

Simplify each expression.

1)  $-6(a + 8)$

2)  $4(1 + 9x)$

3)  $6(-5n + 7)$

4)  $(9m + 10) \cdot 2$

5)  $(-4 - 3n) \cdot -8$

6)  $8(-b - 4)$

7)  $(1 - 7n) \cdot 5$

8)  $-6(x + 4)$

**SIMPLIFYING with Distributive Property and Combining Like Terms**  
(complete problems on next page--or copy problems into notebook.)

### Distributive Property

- Multiply the term being distributed to all terms inside of parentheses
- Always stop distributing where the parentheses end (don't distribute outside parentheses!)
- Be careful of negative signs for multiplication

### Combine Like Terms

- Terms must have the exact same VARIABLES and EXPONENTS for each variable
- Add or Subtract the coefficients of like terms

**Example Problems: Simplify each expression**

**Reminder: DISTRIBUTE BEFORE COMBINING LIKE TERMS**

1)  $x + 3 - 5x + 7 + 4y$

6)  $5(2r + 6) - 12r$

2)  $-4(3a - 5b - 7)$

7)  $-7(3m - 4) + 2$

3)  $9ab + 3b^2 - 7b^2 + 8ab - 12$

8)  $x(2y + 7) + y(9 + 5x)$

4)  $9(4x^2 - 3)$

9)  $3rt + 6r + r(3t - 6)$

5)  $2x + 7x^2 - 9x + 21x^3 + 5x$

10)  $8(2z + 4) - 3(3z - 6)$