

Algebra 1—Unit 1  
 Name: Key  
 Period: \_\_\_\_\_ Date: \_\_\_\_\_

Combining Like terms: **Add the coefficients** of the like terms (like terms—same variables and same exponents)  
 Distribute: multiply each terms in the parentheses by the factor on the outside of the parentheses

**Distributive Property and Combining Like Terms Practice with Notes**

$(3x+2) + 5x(-1)$

$8x+1$

$5x+2 + 4x-4$

$9x-2$

$4xy^2 + 2xy^2 - 3xy - xy^2$

$5xy^2 - 3xy$

$4xy^2 + 2x^2y - 3x^2y - xy^2$

$3xy^2 - x^2y$

$2(x-3) + 6(x+4)$

$2x-6 + 6x+24$

$8x+18$

$2(2x-3) + 0.5(4x+4)$

$4x-6 + 2x+2$

$6x-4$

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

$5x-3$

$(x+4) + (3x+7)$

$4x+11$

Find the perimeter of a triangle with side lengths

Find the perimeter of a rectangle with length of  $(x+7)$  and a width of  $(3x-2)$ .

$(x+7)$   
 $(3x^2-2x)$   
 $(x^2+1)$   $(2x)$   
 $P = S + S + S$   
 $P = (x+7) + (3x^2-2x) + (x^2+2x+1)$   
 $P = 4x^2 - 3x + 8$

*Labels: Formula, Substitution, Solution*

$(x+7)$   
 $(3x-2)$   
 $P = 2l + 2w$   
 $P = 2(3x-2) + 2(x+7)$   
 $6x-4 + 2x+14$   
 $P = 8x+10$