

Name: _____

HW # _____

Simplify each expression by using the distributive property.

1.) $4(3x + 2)$	2.) $-8p(4p + 7)$	3.) $-4m(m + 4)$
4.) $6x(7x^2 + 4)$	5.) $7x^2(x^2 + 5x - 8)$	6.) $8x^2y(5xy + 2)$

For each example, write an equivalent expression by factoring out the greatest common factor from each expression. (“Undistribute” the GCF from the expression).

7.) $5x + 25$	8.) $12m^2 + 4m$	9.) $20x^2 - 4x$
10.) $5k^3 - 10k^2$	11.) $7m + 28m^2$	12.) $12d^2 - 8d - 4$
13.) $6r^2s - 3rs^2$	14.) $14w^2xy - 2lwxy$	15.) $xy^2 + xy$

16.) **Geometry Application:** If the area of the rectangle below is $6x + 3$ square units, and you are given the length ' $2x + 1$ ' as your length. What is the width of the rectangle?

 $2x + 1$

17.) If a square has a perimeter of $16m + 24$ units, write an expression to represent one side of the square.

