Worksheet 2.6 - The Distributive Property (textbook pages 100-107)

## LEVEL 1

Simplify each expression (if possible).
1.) $2 x+3 x$
2.) $-4 x+7 y$
3.) $2 x^{2}-2 x^{2}$

## LEVEL 2

Simplify each expression.
4.) $2 x^{2}+6 x-5 x^{2}$
5.) $3(a+5)$
6.) $(y-2) 4$
7.) $2 x(5+3 y)$
8.) $(r+6 x) 3$
9.) $c(c+7)$

## LEVEL 3

Simplify each expression.
10.) $-w(2 w+8)+w^{2}$
11.) $4 x(3 x-7)+x$

## LEVEL 4

16.) Write an expression for the area of the large rectangle below.

17.) Simplify the expression. Show your work.

$$
2 x(x-7)+4 x(-x+3)+2 x-5
$$

18.) You want to buy a backpack and a new shirt for school. You found a shirt to buy that is $\$ 22$. There is also a 6\% sales tax in Michigan. Let $b$ represent the cost of the backpack. Write an expression to show the total cost of buying both the shirt and backpack with the tax included. Show your work.

