Ch.5.4 The Distributive Property

Objective: To rewrite an expression using the distributive property.

Ex.1 Use the distributive property to evaluate $8(9+4)$

$8(9+4)$
$8(13)$
104

$8(9+4) = 8(9) + 8(4)$
$72 + 32 = 104$

Ex.2. Use the distributive property to rewrite each expression.

$4(x+7) = 4(x) + 4(7)$
$4x + 28$

Ex.3 Use the distributive property to rewrite each expression.

$6(x+4) = 6(x) + 6(4)$
$= 6x + 24$

Ex. 4 Use the distributive property to rewrite each expression.

$$5(-3x + 7y) = 5(-3x) + 5(7y)$$

$$= -15x + 35y$$

Ex. 5 Mr. Ito needs to buy batting helmets for the baseball team. The helmets he plans to buy are $19.95 each. Find the total cost if Mr. Ito needs to buy 9 helmets.

* Use the distributive property to rename 19.95. = (20.00 - 0.05)

$$9(20.00 - 0.05) = 9(20) - 9(0.05)$$

$$180 - 0.45$$

$$\begin{array}{r} {\scriptstyle 7\ 9\ 9\ 10} \\ 180.00 \\ -\ \ .45 \\ \hline \$179.55 \end{array}$$