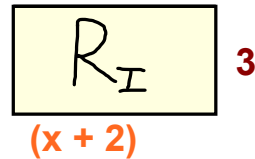
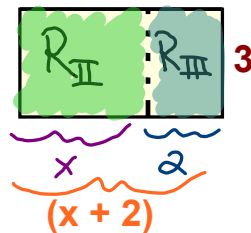


## 2.10 Distributive Property Dec. 04, 2006

ex| Find the Area of a Rectangle  $A_R = l \cdot w$   
whose length is  $(x + 2)$  and width is **3**.



$$\begin{aligned} A_{R_I} &= (x + 2) \cdot 3 \\ &= \underline{\underline{3(x + 2)}} \end{aligned}$$



$$A_{R_{II}} = x \cdot 3 = \underline{\underline{3x}}$$

$$A_{R_{III}} = 2 \cdot 3 = \underline{\underline{6}}$$

$$A_{R_I} = A_{R_{II}} + A_{R_{III}}$$

$$3(x + 2) = 3x + 6$$

we multiply the outside by the 1<sup>st</sup> inside # then the 2<sup>nd</sup> Inside #.

### Distributive Property

The Product of 'a' and (b + c) :

$$a(b + c) = ab + ac$$

$$(b + c)a = ba + ca$$

$$a(b - c) = ab - ac$$

$$(b - c)a = ba - ca$$

$$2(x+5) = 2(x) + 2(5) \\ = \underline{\underline{2x+10}}$$

$$(1+2n)8 = 8(1) + 8(2n) \\ = \underline{\underline{8+16n}}$$

$$(2x-4)\frac{1}{2} = \frac{1}{2}(2x) - \frac{1}{2}(4) \\ = \underline{\underline{1x-2}}$$

$$3(1-y) = 3(1) - 3(y) \\ = \underline{\underline{3-3y}}$$

## Distributive Property with Negatives:

$$\begin{aligned} -3(x+4) &= -3(x) + -3(4) \\ &= -3x \oplus 12 \\ &= \underline{\underline{-3x - 12}} \end{aligned}$$

$$\begin{aligned} -3(x-5) &= -3(x) - -3(5) \\ &= -3x \ominus 15 \\ &= -3x + 15 \end{aligned}$$

$$\begin{aligned} -1(6-3x) &= -1(6) - -1(3x) \\ &= -6 \ominus 3x \\ &= \underline{\underline{-6 + 3x}} \end{aligned}$$

Remember Negative Means Opp.

O.T.L.

① pg 66: Exp. 1-9 (all)

② Turn in...

**Pg. 63: 1-15 all**