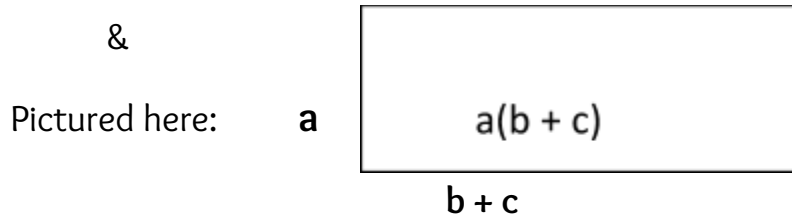


## The DISTRIBUTIVE PROPERTY

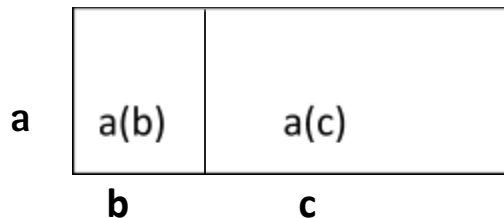
### Equivalent Expressions using the DISTRIBUTIVE PROPERTY

The Factored form is written as:  $a(b + c)$



The **Factored** form is **EQUIVLANT (=)** to the **Expanded** form below.

Expanded Form shown here:



**Example:**

$$\begin{aligned}
 7 \times 132 &= 7(100 + 30 + 2) \quad \leftarrow \text{Factored form} \\
 &= 7(100) + 7(30) + 7(2) \quad \leftarrow \text{Expanded form} \\
 &= 700 + 210 + 14 \\
 &= 924
 \end{aligned}$$

Algebra	Example
$a(b + c) = a(b) + a(c)$	$9(4 + 5) = 9(4) + 9(5)$ Factored form = Expanded form
$a(b - c) = a(b) - a(c)$	$5(8 - 2) = 5(8) - 5(2)$ Factored form = Expanded form