The DISTRIBUTIVE PROPERTY

Equivalent Expressions using the DISTRIBUTIVE PROPERTY

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

\[ \]

Pictured here: \( a \)

\( a(b + c) \)

\( b + c \)

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

Expanded Form shown here:

\[ \]

\( a \)

\( a(b) \)

\( a(c) \)

\( b \)

\( c \)

Example:

\[ 7 \times 132 = 7(100 + 30 + 2) \]

Factored form

\[ = 7(100) + 7(30) + 7(2) \]

Expanded form

\[ = 700 + 210 + 14 \]

\[ = 924 \]

<table>
<thead>
<tr>
<th>Algebra</th>
<th>Example</th>
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<tbody>
<tr>
<td>( a(b + c) = a(b) + a(c) )</td>
<td>( 9(4 + 5) = 9(4) + 9(5) )</td>
</tr>
<tr>
<td></td>
<td>Factored form = Expanded form</td>
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<tr>
<td>( a(b - c) = a(b) - a(c) )</td>
<td>( 5(8 - 2) = 5(8) - 5(2) )</td>
</tr>
<tr>
<td></td>
<td>Factored form = Expanded form</td>
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