## Distributive Property

$6^{\text {th }}$ Grade
Mr. Wong

What is the Distributive Property?

Is when you multiply the number outside of the parenthesis to the numbers or variables inside the parenthesis.

$$
\begin{gathered}
5(2+x) \\
5(2)+5(x) \\
10+5 x
\end{gathered}
$$

## Example 1

Write each product using the Distributive Property. Then simplify. 9(31)

$$
9(30+1)
$$

Rewrite 31 as a Sum
$(9 \cdot 30)+(9 \cdot 1) \quad$ Distributive Property
$270+9$
Multiply
279
Add.

## Example 2

Write each product using the Distributive Property. Then simplify. 8(59)

$$
8(60-1)
$$

Rewrite 59 as a Difference
$(8 \cdot 60)-(8 \cdot 1) \quad$ Distributive Property

| $480-8$ | Multiply |
| :---: | :---: | :---: |
| 472 | Subtract |

## Example 3: $2(10+3)=2(13)$



Example 4: $3(20+4)=3(24)$

## 20 <br> $+$ <br> 4

60
12
distribute

$3(20+4)$
$3(20)+3(4)$
$60+12$
72

