

Distributive- you can write a multiplication problem in different ways using addition and multiplication by distributing numbers.

CONVERTING TWO FACTORS TO TWO SETS OF PARENTHESES

Going from a multiplication expression with two factors and turning it into an addition expression adding two products together, you copy the first factor down and place that factor (4) at the beginning of each parentheses. Then you think of an addition math fact that equals the second factor (10 + 3). Take each of those addends and place them at the end of each of the parentheses.

$$4 \times 13 = (4 \times 10) + (4 \times 3)$$

CONVERTING TWO FACTORS TO ONE FACTOR AND AN ADDITION EXPRESSION IN ONE SET OF PARENTHESES

Copy the first factor as you see it. Just take the second factor (13) and make an addition problem out of it. Place that addition problem in parentheses.

$$4 \times 13 = 4 \times (10 + 3)$$

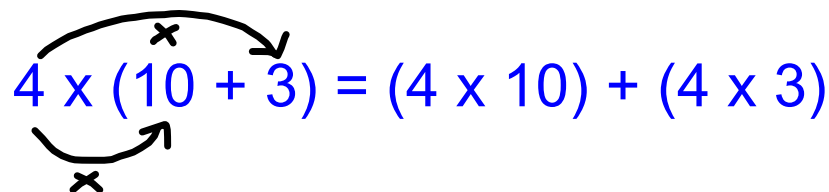
CONVERTING TWO SETS OF PARENTHESES TO JUST TWO FACTORS

Recognize which number you see in both sets of parentheses (4). That is your first factor. Add up the second factors in each parentheses. This sum is your second factor.

$$(4 \times 10) + (4 \times 3) = 4 \times 13$$


CONVERTING A FACTOR AND ONE SET OF PARENTHESES TO TWO SETS OF PARENTHESES

Take the factor outside the parentheses and take it times the first number in the parentheses. Then take the factor outside and multiply it by the second number on the inside of the parentheses. Add those two expressions together.

$$4 \times (10 + 3) = (4 \times 10) + (4 \times 3)$$


Attachments

GraphingCoordinatePlaneQuad1.png