

Name _____

Date _____

Factor Using the Distributive Property

If the terms in an expression share a common factor, you can “factor” that expression. That means you can rewrite it as a product. Let’s try it with the expression $40 + 16$.

First, find the greatest common factor (GCF) of 40 and 16. The GCF is 8. Then, you can rewrite the expression as a product using the distributive property.

$$\begin{aligned} 40 + 16 &= (8 \times 5) + (8 \times 2) \\ &= 8(5 + 2) \end{aligned}$$

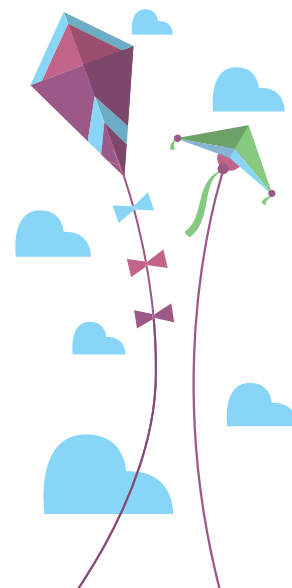
Let's try another example: $15 + 24$.

The GCF of 15 and 24 is 3. Rewrite the expression using the distributive property.

$$15 + 24 = 3(5 + 8)$$

Check your answer. Apply the distributive property to make sure you get the expression from before.

$$3(5 + 8) = 15 + 24$$



Write the GCF. Then factor using the distributive property. Check your answer by applying the distributive property.

$8 + 12$ GCF: <u>4</u> $8 + 12 = 4(2 + 3)$	$21 + 15$ GCF: _____ $21 + 15 =$ _____	$20 + 30$ GCF: _____ $20 + 30 =$ _____
$30 + 16$ GCF: _____ $30 + 16 =$ _____	$27 + 36$ GCF: _____ $27 + 36 =$ _____	$35 + 50$ GCF: _____ $35 + 50 =$ _____
$32 + 48$ GCF: _____ $32 + 48 =$ _____	$40 + 72$ GCF: _____ $40 + 72 =$ _____	$56 + 42$ GCF: _____ $56 + 42 =$ _____