

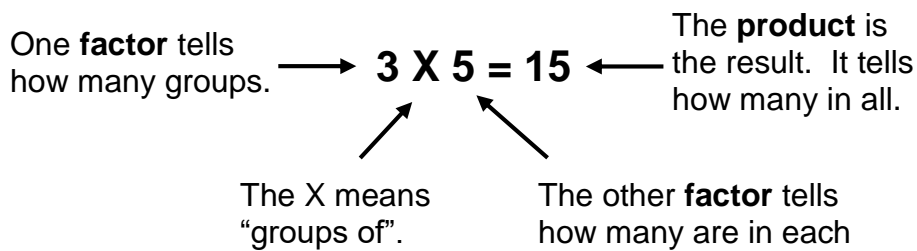
## 3<sup>rd</sup> grade: Multiplication

### Understand the Meaning of Multiplication

When you have equal groups of objects, you can **multiply** to find a total. Groups are called equal groups when they all have the same number of objects.

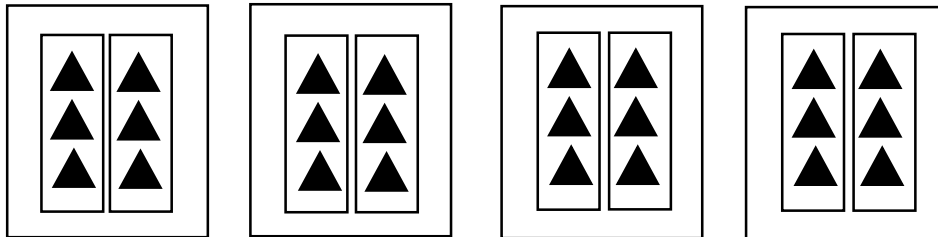


There are **3 groups**. There are **5 stars** in each group.  
You can write this as **3 X 5**. Think of 3 X 5 as “3 groups of 5”.  
3 groups of 5 stars is 15 stars in all.  $3 \times 5 = 15$



### Use Order and Grouping to Multiply

Sue has 4 bags. Each bag has 2 packs of stickers. Each pack has 3 stickers. How many stickers does Sue have?



To solve, multiply 4 bags X 2 packs in each bag. That's 8 packs.  
Then multiply the 8 packs X 3 stickers in each pack. That's 24 stickers.

$$(4 \times 2) \times 3 \longrightarrow 8 \times 3 = 24$$

But what if you don't know  $8 \times 3$ ? Try changing the order. Multiply two different numbers first.

Multiply 2 packs X 3 stickers in each pack. That's 6 stickers in each bag. Then multiply 4 boxes X 6 stickers in each bag. That's 24 stickers. The parentheses in the problem below show which numbers you are multiplying first.

$$4 \times (2 \times 3) \longrightarrow 4 \times 6 = 24$$