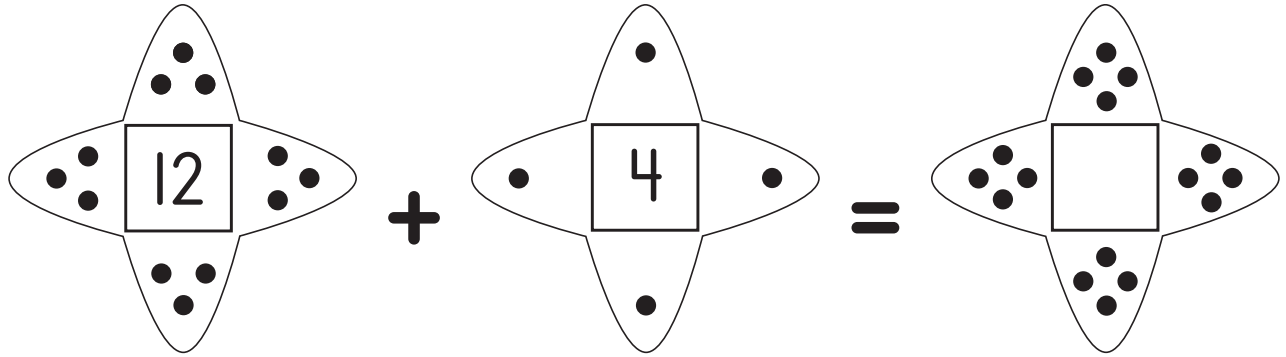


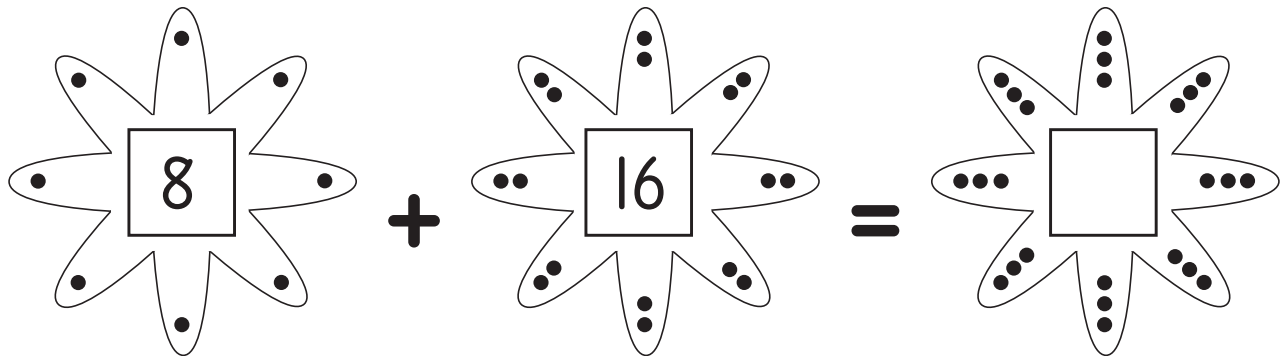
Name: _____

Groups-Associative-Commutative



$$4 \times \boxed{3} + 4 \times \boxed{} = 4 \times \boxed{}$$

$$4 \times (\boxed{3} + \boxed{}) = 4 \times \boxed{}$$



$$8 \times \boxed{} + 8 \times \boxed{2} = 8 \times \boxed{}$$

$$8 \times (\boxed{} + \boxed{2}) = 8 \times \boxed{}$$

Teacher Notes: Groups-Associative-Communicative (Grade 3)

ONLINE ACTIVITY

[Under the Sea](#)

ESL VOCABULARY

associative

communicative

LEAD-IN ACTIVITY SUGGESTIONS

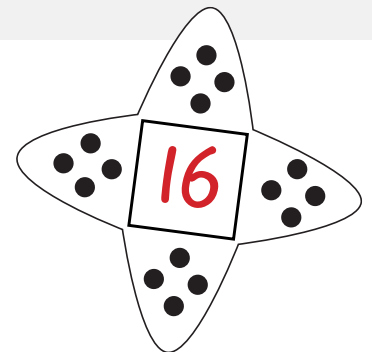
1. Use manipulatives to demonstrate a multiplication equation with smaller numbers (e.g., 3×5). Ask students what the equation is and what the product is, and write it on the board. Now, rotate the manipulatives from horizontal to vertical, and ask students what the equation is (e.g., from 3×5 to 5×3). Has the product changed? So it's OK to switch the numbers in a multiplication equation? Turn focus to the worksheet.

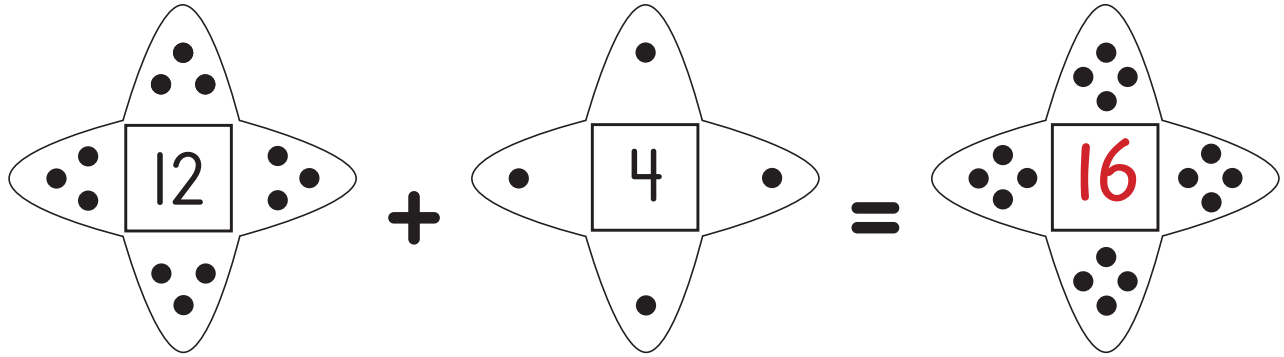
EXTENSION ACTIVITY SUGGESTIONS

1. To review the associative and commutative properties for addition, ask students to complete Grade 1 Math online activities Commutative and Associative.
2. Direct students to the Starfall online activity Multiplication Slider for more practice using multiplication tables and practicing multiplication facts.

ADDITIONAL NOTES

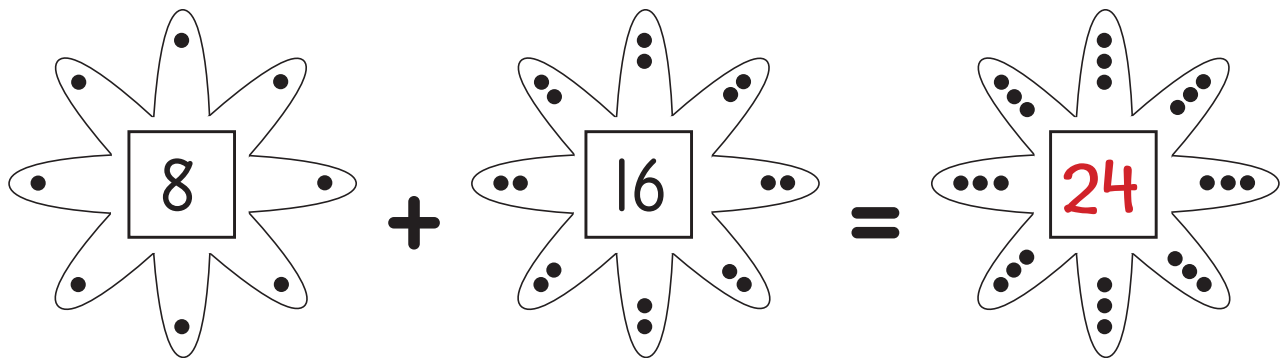
1. **Virtual:** Share screens with the Interactive Multiplication Chart on the Starfall Parent Teacher Center. Using a multiplication chart will help to show that the order of the numbers in a multiplication equation does not affect the product.





$$4 \times \boxed{3} + 4 \times \boxed{1} = 4 \times \boxed{4}$$

$$4 \times (\boxed{3} + \boxed{1}) = 4 \times \boxed{4}$$



$$8 \times \boxed{1} + 8 \times \boxed{2} = 8 \times \boxed{3}$$

$$8 \times (\boxed{1} + \boxed{2}) = 8 \times \boxed{3}$$