

KEY CONCEPT OVERVIEW

Lessons 1 and 2 focus on the commutative property. This property helps students recognize, for example, that if they know $3 \times 6 = 18$, then they also know $6 \times 3 = 18$. Lesson 3 introduces the use of a letter to represent unknown values in **equations**.

You can expect to see homework that asks your child to do the following:

- Use **arrays** to write two multiplication facts.
- Match **expressions** that show the commutative property, for example, $3 \times 6 = 6 \times 3$; 3 sixes = 6 threes; 10 twos = 2×10 .
- Find the value of the unknown (or letter) in simple equations and in word problems (as shown in the Sample Problem below).

SAMPLE PROBLEM (From Lesson 3)

Each equation contains a letter representing the unknown. Find the value of the unknown.

$12 \div 3 = c$	$c = \underline{4}$
$4 \times a = 24$	$a = \underline{6}$

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Give your child a blank multiplication chart (ask your child’s teacher for one, or search online for a printable), and ask him to fill in as many facts as possible in five minutes. Ask your child what strategies he used to fill in the chart quickly.

×	1	2	3	4	5	6	7	8	9	10
1		2	3							
2		4		8				16		
3						18				
4					20					
5										50
6		12								
7										
8										
9										
10										

HOW YOU CAN HELP AT HOME *(continued)*

- Play The Product Dice Game with your child.
 1. Player 1 rolls two dice and multiplies those two numbers together. On a piece of paper, write the multiplication equation and the product for that turn, which represents the score.
 2. Pass the dice to Player 2, who does the same.
 3. When the dice return to Player 1, add the product of the new roll to the previous score. The player who reaches 500 first is the winner.

For example:

Player 1 Roll 1: $5 \times 4 = 20$

Player 1 Roll 2: $6 \times 5 = 30$; $20 + 30 = 50$, so Player 1's score is now 50.

Player 1 Roll 3: $2 \times 3 = 6$; $50 + 6 = 56$, so Player 1's score is now 56.
- Variation: Use one die and a deck of playing cards up to the 10's (no aces or face cards). Roll one die, and then choose one card and multiply the two numbers together. This will help your child practice larger facts.

TERMS

Equation: A statement that two expressions are equal, for example, $3 \times 4 = \underline{\quad}$ or $3 \times 4 = 12$.

Expression: Any combination of sums, differences, products, or divisions of numbers that evaluates to a number. Expressions do not have an equal sign. For example, $3 + 4$, 3×4 , and $12 \div 4$ are all expressions.

MODELS

Array: An arrangement of objects in rows and columns.

