LESSON MAKER PRO

Mystery Number Moves

Find missing numbers in multiplication and division sentences.

GRADE 4 · 4.A.2

4.A.2 "Use multiplication and division with variables to create number sentences representing a given mathematical situation. Use the relationships between multiplication and division with the properties of multiplication to solve problems and..."

NAME _____ DATE _____

USE A RELATED FACT

A blank can stand for an unknown number. To find an unknown factor, divide the product by the factor you know. Multiply to check that your answer makes the number sentence true.

WORKED EXAMPLE

Find the missing number: 3 × ____ = 33.

1. Divide the product by the known factor: 33 ÷ 3 = 11.
2. Check: 3 × 11 = 33.

Answer: 11

PRACTICE 6 problems

1 Find the missing number: 5 × ___ = 40.

ANSWER _____

2 Find the missing number: 28 ÷ ___ = 4.

ANSWER _____

3 Find the missing number: ___ ÷ 8 = 6.

ANSWER _____

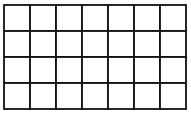
4 Find the missing number: 4 × ___ = 32 ÷ 2.

ANSWER _____

5 Find the missing number: 10 × ___ = 70.

ANSWER _____

6 Use the array to fill in both blanks: 4 × ___ = ___.



ANSWER _____

_____

APPLY IT Show your work

1 You make 56 friendship bracelets. Each gift bag holds 8 bracelets. How many gift bags can you fill? Write a multiplication sentence with ___, then solve.

WORK SPACE

ANSWER _____

2 Four friends earn the same number of tickets at an arcade. Together they earn 52 tickets. How many tickets does each friend earn? Write a multiplication sentence with ___, then solve.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Fill the blank with the smallest whole number that makes $5 \times 8 < 5 \times ___$ true. Explain why a smaller number does not work.

WORK SPACE AND ANSWER

ANSWER KEY

Mystery Number Moves

GRADE 4 · 4.A.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find the missing number: 5 × ___ = 40.	**8**
2	Find the missing number: 28 ÷ ___ = 4.	**7**
3	Find the missing number: ___ ÷ 8 = 6.	**48**
4	Find the missing number: 4 × ___ = 32 ÷ 2.	**4**
5	Find the missing number: 10 × ___ = 70.	**7**
6	Use the array to fill in both blanks: 4 × ___ = ___.	**7, 28**

PART 2 · APPLY IT

1. **8 × ___ = 56; 7 gift bags** Divide 56 by 8 to find the number of bags. Check that 8 × 7 = 56.
2. **4 × ___ = 52; 13 tickets** Divide 52 by 4 to find each friend's share. Check that 4 × 13 = 52.

CHALLENGE

9. Since 5 × 8 = 40 and 5 × 9 = 45, the sentence is true. Using 8 makes the sides equal, and any smaller whole number makes the right side less than 40.

For the word problems, accept equivalent multiplication sentences with the factors reversed. For the array, the first blank is the number of columns and the second is the total number of objects.