LESSON MAKER PRO

Fact Family Finds

Use multiplication to solve division, and division to check multiplication.

GRADE 3 · 3.NOS.C.5

3.NOS.C.5 "Explain and use the inverse relationship between multiplication and division to determine the unknown whole number in a multiplication or division equation involving three whole numbers (e.g...."

NAME _____ DATE _____

TURN THE FACT AROUND

Multiplication and division are related. If you know that 5 x 7 = 35, you also know that 35 / 5 = 7. Turn an equation around to find a missing number, then use the related fact to check it.

WORKED EXAMPLE

Find the missing number: 35 / 5 = ____

1. Think of a multiplication equation: 5 x ___ = 35.
2. Find the factor: 5 x 7 = 35.
3. Put 7 in the division equation: 35 / 5 = 7.

Answer: 7

PRACTICE 6 problems

1 Find the missing number. Write a multiplication fact that proves it: 24 / 3 = ___

ANSWER _____

2 Find the missing number. Write a division fact that proves it: 4 x ___ = 36

ANSWER _____

3 Find the missing number: 32 / ___ = 4

ANSWER _____

4 Find the missing number: ___ x 9 = 54

ANSWER _____

5 Find the missing number. Write a multiplication fact that proves it: 18 / ___ = 9

ANSWER _____

6 Find the missing number: 80 / 8 = ___

ANSWER _____

APPLY IT Show your work

1 You have 36 game tokens. Each prize costs 9 tokens. How many prizes can you get? Write a multiplication fact to check your answer.

WORK SPACE

ANSWER _____

2 A class puts 64 stickers into 8 equal packs for a school fair. How many stickers go in each pack? Write a multiplication fact to check your answer.

WORK SPACE

ANSWER _____

CHALLENGE One step up

The same number fills both blanks: 72 / ___ = 9 and 72 / 9 = ___. What is the number? Explain why it works in both equations using a multiplication fact.

WORK SPACE AND ANSWER

ANSWER KEY

Fact Family Finds

GRADE 3 · 3.NOS.C.5

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find the missing number. Write a multiplication fact that proves it: 24 / 3 = ___	**8; 3 x 8 = 24**
2	Find the missing number. Write a division fact that proves it: 4 x ___ = 36	**9; 36 / 4 = 9**
3	Find the missing number: 32 / ___ = 4	**8**
4	Find the missing number: ___ x 9 = 54	**6**
5	Find the missing number. Write a multiplication fact that proves it: 18 / ___ = 9	**2; 2 x 9 = 18**
6	Find the missing number: 80 / 8 = ___	**10**

PART 2 · APPLY IT

1. **4 prizes; 9 x 4 = 36** Divide 36 by 9 to get 4. Check by multiplying 9 x 4.
2. **8 stickers; 8 x 8 = 64** Divide 64 by 8 to get 8 stickers per pack. Check by multiplying 8 x 8.

CHALLENGE

8. Both equations work because 9 x 8 = 72 and 8 x 9 = 72.

Accept either order of the factors in a correct multiplication check. For the challenge, accept an explanation that 8 and 9 multiply to make 72, so both divisions give the other factor.