LESSON MAKER PRO

Fact Family Power

Use multiplication and division facts that belong together.

GRADE 3 · 3.CE.2.b

3.CE.2.b "Use inverse relationships to write the related facts connected to a given model for multiplication and division of whole numbers through 10 × 10."

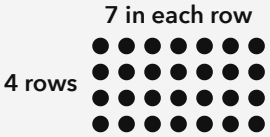
NAME _____ **DATE** _____

RELATED FACTS

Multiplication makes a total, and division breaks the total into equal parts. If you know 3 × 5 = 15, division can help you find either factor from the total. Use the same three numbers to write related facts.

WORKED EXAMPLE

The array has 4 rows of 7 dots. Write the two related division facts and say what each quotient counts.

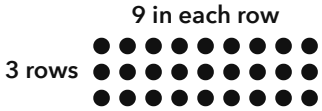


1. There are 4 × 7 = 28 dots.
2. 28 ÷ 4 = 7 dots in each row.
3. 28 ÷ 7 = 4 rows.

Answer: 28 / 4 = 7; 28 / 7 = 4

PRACTICE 6 problems

1 Use this array to write a multiplication fact and two related division facts.



ANSWER _____

_____

2 Model: 40 / 8 = 5. Write the related multiplication fact and the other related division fact.

ANSWER _____

_____

3 Model: 10 × 6 = 60. Write the two related division facts.

ANSWER _____

_____

4 Model: 8 × 8 = 64. Write the related division fact.

ANSWER _____

5 Model: 2 × 9 = 18. Complete both related division facts: 18 / 2 = ___ and 18 / 9 = ___.

ANSWER _____

_____

6 Model: 45 / 5 = 9. Write both related multiplication facts.

ANSWER _____

_____

APPLY IT Show your work

1 At a school book swap, 5 tables hold 6 mystery books each. How many books are there? Write a related division fact that checks your answer. Draw an array that represents the tables and their books.

2 A game club puts 9 trading cards in each of 8 prize boxes. How many cards are there? If the cards are shared equally among 8 players, how many cards does each player get? Write a multiplication fact and a division fact.

CHALLENGE One step up

A fact family has a product of 54. One factor is 6. Write all four related multiplication and division facts.

ANSWER KEY

Fact Family Power

GRADE 3 · 3.CE.2.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use this array to write a multiplication fact and two related division facts.	**3 × 9 = 27; 27 ÷ 3 = 9 and 27 ÷ 9 = 3.**
2	Model: 40 / 8 = 5. Write the related multiplication fact and the other related division fact.	**8 × 5 = 40; 40 / 5 = 8**
3	Model: 10 × 6 = 60. Write the two related division facts.	**60 / 10 = 6; 60 / 6 = 10**
4	Model: 8 × 8 = 64. Write the related division fact.	**64 / 8 = 8**
5	Model: 2 × 9 = 18. Complete both related division facts: 18 / 2 = ___ and 18 / 9 = ___.	**18 / 2 = 9; 18 / 9 = 2**
6	Model: 45 / 5 = 9. Write both related multiplication facts.	**5 × 9 = 45; 9 × 5 = 45**

PART 2 · APPLY IT

1. **An array of 5 rows of 6 books, 30 books total; 5 × 6 = 30 and 30 ÷ 5 = 6 (or 30 ÷ 6 = 5).** Multiply 5 × 6 to find 30 books. Divide 30 by 5 to check that each table has 6 books.
2. **72 cards; 9 cards each; 8 × 9 = 72; 72 / 8 = 9** Multiply 8 × 9 to find 72 cards. Divide 72 by 8 to find 9 cards for each player.

CHALLENGE

6 × 9 = 54; 9 × 6 = 54; 54 / 6 = 9; 54 / 9 = 6

Accept multiplication equations with factors in either order. For the first word problem, accept 30 / 6 = 5 as another correct division check, and for the second, accept 72 / 9 = 8 as another correct division fact.