

Fact Family Power

Use multiplication and division facts together.

GRADE 3 • 3.OA.B

CCSS.Math.Content.3.OA.B "Understand properties of multiplication and the relationship between multiplication and division."

NAME _____

DATE _____

MULTIPLICATION AND DIVISION PARTNERS

You can use multiplication to check division. If $a \times b = \text{total}$, then $\text{total} \div a = b$ and $\text{total} \div b = a$. You can also change the order or grouping of factors without changing the product.

WORKED EXAMPLE

Find $28 \div 4$.

1. Think of a multiplication fact with 4.
2. $4 \times 7 = 28$.
3. So $28 \div 4 = 7$.

Answer: 7

PRACTICE 6 problems

1 $6 \times 9 = ?$

ANSWER _____

2 $54 \div 9 = ?$

ANSWER _____

3 $8 \times n = 56$. What is n ?

ANSWER _____

4 $m \times 5 = 35$. What is m ?

ANSWER _____

5 $3 \times 12 = ? \times 3$

ANSWER _____

6 $2 \times (10 \times 5) = (2 \times 10) \times ?$

ANSWER _____

APPLY IT Show your work

- 1** A video game club has 9 teams. Each team has 6 players. How many players are in the club?

WORK SPACE

ANSWER _____

- 2** A student has 72 stickers to share equally among 8 friends. How many stickers does each friend get?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A music club puts 3 rows of 5 chairs in each of 6 sections. The club rearranges all the chairs into 9 equal rows. How many chairs are in each row?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$6 \times 9 = ?$	54
2	$54 \div 9 = ?$	6
3	$8 \times n = 56$. What is n ?	7
4	$m \times 5 = 35$. What is m ?	7
5	$3 \times 12 = ? \times 3$	12
6	$2 \times (10 \times 5) = (2 \times 10) \times ?$	5

PART 2 • APPLY IT

1. **54 players** Multiply 9×6 to find the total number of players. $9 \times 6 = 54$.
2. **9 stickers** Divide 72 by 8 to find how many stickers each friend gets. $72 \div 8 = 9$.

CHALLENGE

10 chairs in each row

Accept equivalent equations that show the same multiplication or division relationship. For the challenge, students may multiply $3 \times 5 \times 6$ to get 90, then divide 90 by 9.