

Fact Family Fun

Use multiplication and division together.

GRADE 3 • 3.PAR.3.2

3.PAR.3.2 "Represent single digit multiplication and division facts using a variety of strategies. Explain the relationship between multiplication and division."

NAME _____

DATE _____

THE BIG IDEA

Multiplication combines equal groups. Division breaks a total into equal groups or tells how many groups there are. Use a related multiplication fact to solve a division fact.

WORKED EXAMPLE

Solve 7×8 . Show an equal-groups strategy.

1. Think of 7 groups of 8.
2. Add $8 + 8 + 8 + 8 + 8 + 8 + 8$.
3. The sum is 56.

Answer: $7 \times 8 = 56$

PRACTICE 6 problems

1 Use repeated addition to solve: $4 \times 6 = \underline{\hspace{2cm}}$

ANSWER _____

2 Use a related multiplication fact to solve: $24 \div 4 = \underline{\hspace{2cm}}$

ANSWER _____

3 Write a multiplication equation for 3 groups of 5.

ANSWER _____

4 Complete the related division fact: $5 \times 6 = 30$, so $30 \div 5 = \underline{\hspace{2cm}}$.

ANSWER _____

5 Write two related facts, one multiplication fact and one division fact, using 2, 9, and 18.

ANSWER _____

6 A total is split into 3 equal groups of 4. Write a division equation.

ANSWER _____

APPLY IT Show your work

- 1** Maya puts 6 stickers on each of 5 notebook covers. How many stickers does she use?

WORK SPACE

ANSWER _____

- 2** Twenty-four trading cards are shared equally among 4 friends. How many cards does each friend get?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Lena knows that $6 \times 9 = 54$. Write two related division facts. Then explain how multiplication and division are related.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Use repeated addition to solve: $4 \times 6 = \underline{\quad}$	24
2	Use a related multiplication fact to solve: $24 \div 4 = \underline{\quad}$	6
3	Write a multiplication equation for 3 groups of 5.	$3 \times 5 = 15$
4	Complete the related division fact: $5 \times 6 = 30$, so $30 \div 5 = \underline{\quad}$.	6
5	Write two related facts, one multiplication fact and one division fact, using 2, 9, and 18.	$2 \times 9 = 18$; $18 \div 2 = 9$
6	A total is split into 3 equal groups of 4. Write a division equation.	$12 \div 3 = 4$

PART 2 • APPLY IT

1. **30 stickers** There are 5 equal groups of 6 stickers. Multiply 5×6 to get 30.
2. **6 cards** Divide 24 cards into 4 equal groups. Since $4 \times 6 = 24$, each friend gets 6 cards.

CHALLENGE

$54 \div 6 = 9$ and $54 \div 9 = 6$. Multiplication and division are opposite operations, so the multiplication fact can help solve both division facts.

Accept multiplication facts written in either factor order, such as $9 \times 2 = 18$. Accept either matching division fact for problem 5 if it uses the same three numbers correctly.