

Missing Number Mission

Use multiplication and division to find each blank.

GRADE 3 • MA.3.AR.2.3

MA.3.AR.2.3 "Determine the unknown whole number in a multiplication or division equation, relating three whole numbers, with the unknown in any position."

NAME _____

DATE _____

USE OPPOSITE OPERATIONS

Multiplication and division are opposite operations. To find a missing factor, divide the product by the known factor. To find a missing number in a division equation, use multiplication or division to check your answer.

WORKED EXAMPLE

$$9 \times \underline{\quad} = 63$$

1. The missing number is a factor.
2. Divide the product by the known factor.
3. $63 \div 9 = 7$.
4. Check: $9 \times 7 = 63$.

Answer: 7

PRACTICE 6 problems

1 $4 \times \underline{\quad} = 32$

ANSWER _____

2 $\underline{\quad} \div 5 = 6$

ANSWER _____

3 $48 \div \underline{\quad} = 8$

ANSWER _____

4 $12 = \underline{\quad} \times 2$

ANSWER _____

5 $44 \div 4 = \underline{\quad}$

ANSWER _____

6 $10 \times 3 = \underline{\quad}$

ANSWER _____

APPLY IT Show your work

- 1** A science club puts 48 glow-in-the-dark stars into 4 equal prize bags. How many stars are in each bag?

WORK SPACE

ANSWER _____

- 2** Jada has 60 trading cards. She puts 6 cards on each binder page. How many pages does she fill?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A game club has 96 tickets. It shares them equally among 8 teams. Each team puts its tickets into packs of 4. How many packs does each team make? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$4 \times \underline{\quad} = 32$	8
2	$\underline{\quad} \div 5 = 6$	30
3	$48 \div \underline{\quad} = 8$	6
4	$12 = \underline{\quad} \times 2$	6
5	$44 \div 4 = \underline{\quad}$	11
6	$10 \times 3 = \underline{\quad}$	30

PART 2 • APPLY IT

1. **12 stars** Divide 48 by 4. Each prize bag has 12 stars.
2. **10 pages** Divide 60 by 6. Jada fills 10 pages.

CHALLENGE

3 packs. $96 \div 8 = 12$ tickets per team, and $12 \div 4 = 3$ packs.

Accept correct equations, words, or drawings that show the missing number. For word problems, accept the number with or without the unit if the answer is otherwise correct.