LESSON MAKER PRO

Equal Fact Detectives

Use related multiplication and division facts to find missing numbers.

GRADE 3 · MA.3.AR.2

MA.3.AR.2 "Develop an understanding of equality and multiplication and division."

NAME _____ DATE _____

BALANCE THE FACTS

An equation is balanced when each side has the same value. Multiplication and division are related facts, so you can use one fact to help find a missing number in the other fact.

WORKED EXAMPLE

Complete: $7 \times 8 =$ ____ and $56 \div 7 =$ ____

1. Multiply: $7 \times 8 = 56$.
2. Use the same fact to divide: $56 \div 7 = 8$.

Answer: $7 \times 8 = 56$; $56 \div 7 = 8$

PRACTICE 6 problems

1 ___ × 4 = 36

ANSWER _____

2 54 ÷ ___ = 6

ANSWER _____

3 ___ ÷ 3 = 15

ANSWER _____

4 11 × ___ = 22

ANSWER _____

5 48 ÷ ___ = 12

ANSWER _____

6 ___ × 10 = 60

ANSWER _____

APPLY IT Show your work

1 A student has 45 crayons and puts the same number of crayons into 5 art boxes. How many crayons are in each box?

WORK SPACE

ANSWER _____

2 A collector puts 54 trading cards equally onto 6 album pages. How many cards go on each page?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The same number fills both blanks. What is the number? Explain how you know. ___ × 5 = 45 and 81 ÷ ___ = 9

WORK SPACE AND ANSWER

ANSWER KEY

Equal Fact Detectives

GRADE 3 · MA.3.AR.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	___ × 4 = 36	**9**
2	54 ÷ ___ = 6	**9**
3	___ ÷ 3 = 15	**45**
4	11 × ___ = 22	**2**
5	48 ÷ ___ = 12	**4**
6	___ × 10 = 60	**6**

PART 2 · APPLY IT

1. **9 crayons** Divide 45 crayons into 5 equal boxes. 45 ÷ 5 = 9.
2. **9 cards** Divide 54 cards into 6 equal pages. 54 ÷ 6 = 9.

CHALLENGE

9. 9 × 5 = 45 and 81 ÷ 9 = 9.

Accept a number alone or a completed equation for Part 1. For the challenge, accept 9 with a correct check of both equations.