LESSON MAKER PRO

# Fact Strategy Sprint

*Use smart strategies to solve multiplication facts.*

**GRADE 3 · 3.CE.2.d**

**3.CE.2.d** "Demonstrate fluency with multiplication facts through 10 × 10 by applying reasoning strategies (e.g., doubling, add-a-group, subtract-a-group, near squares, and inverse relationships)."

NAME _____ DATE _____

## BUILD FROM FACTS YOU KNOW

A multiplication fact can be built from a fact you already know. You can double a group, add a group, subtract a group, use a near square, or use division to check a multiplication fact.

## WORKED EXAMPLE

Look at the array. How many dots are there?



1. Split the 4 rows into 2 rows and 2 rows.
2. 2 × 7 = 14.
3. Double 14 to get 28.

**Answer: 28**

## PRACTICE 6 problems

**1** Look at the array. How many dots are there?



**ANSWER** _____

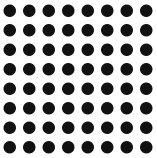
**2** Use the near-square fact 6 × 6 to find 6 × 5.

**ANSWER** _____

**3** Use 10 × 5 to find 9 × 5. Subtract one group of 5.

**ANSWER** _____

**4** Look at the array. How many dots are there?



**ANSWER** _____

**5** Use the inverse relationship. 3 × 9 = 27, so 27 / 3 = ___.

**ANSWER** _____

**6** Use 5 × 2 = 10 to find 6 × 2.

**ANSWER** _____

## APPLY IT Show your work

**1** At game club, Maya fills 6 pages with 9 stickers on each page. How many stickers does she use?

WORK SPACE

**ANSWER** _____

**2** For a scooter obstacle course, a coach puts 8 cones in each of 5 lanes. How many cones does the coach use?

WORK SPACE

**ANSWER** _____

## CHALLENGE One step up

Without finding each fact separately, use 10 × 9 to find 9 × 9. Write one equation and one sentence that explains your reasoning.

WORK SPACE AND ANSWER

**ANSWER KEY**

# Fact Strategy Sprint

**GRADE 3 · 3.CE.2.d**

## PART 1 · PRACTICE

| # | PROBLEM | ANSWER |
|---|---|---|
| 1 | Look at the array. How many dots are there? | **24** |
| 2 | Use the near-square fact 6 × 6 to find 6 × 5. | **30** |
| 3 | Use 10 × 5 to find 9 × 5. Subtract one group of 5. | **45** |
| 4 | Look at the array. How many dots are there? | **64** |
| 5 | Use the inverse relationship. 3 × 9 = 27, so 27 / 3 = ___. | **9** |
| 6 | Use 5 × 2 = 10 to find 6 × 2. | **12** |

## PART 2 · APPLY IT

1. **54** Multiply 6 groups of 9. 6 × 9 = 54.
2. **40** Multiply 5 groups of 8. 5 × 8 = 40.

## CHALLENGE

**10 × 9 - 9 = 81. Ten groups of nine are 90, and one fewer group is 81.**

Accept any correct reasoning strategy for the practice and word problems. For the challenge, accept an equation showing 90 minus 9 equals 81 and a sentence explaining that one group of 9 was removed.