LESSON MAKER PRO

Fact Detective

Build multiplication and division facts from facts you know.

GRADE 4 · 4.NOS.C.7

4.NOS.C.7 "Recall or quickly derive multiplication and division facts within 100 (e.g., factors less than or equal to 10 and quotients less than are equal to 10). Skip count (2s, 5s, 10s) and apply properties of operations (0s..."

NAME _____ DATE _____

BUILD A FACT

You can find a multiplication fact by doubling a group, adding another group, or splitting a factor into easier parts. To divide, think of a multiplication fact with a missing number.

WORKED EXAMPLE

Find 3×7 using a double fact.

1. Double 7: 7 + 7 = 14, so 2 × 7 = 14.
2. Add one more group of 7: 14 + 7 = 21.

Answer: 3 × 7 = 21

PRACTICE 6 problems

1 Find 4 × 8 by doubling 2 × 8.

ANSWER _____

2 Find 9 × 6 using 10 × 6.

ANSWER _____

3 Find 5 × 9 by skip-counting by 5s.

ANSWER _____

4 Find 42 ÷ 6. Think: 6 × ___ = 42.

ANSWER _____

5 Find both products: 0 × 10 and 1 × 10.

ANSWER _____

_____

6 Find 64 ÷ 8 using a multiplication fact.

ANSWER _____

APPLY IT Show your work

1 At game night, 6 teams each get 8 tokens. How many tokens do the teams get in all?

WORK SPACE

ANSWER _____

2 Five friends share 45 trading cards equally. How many cards does each friend get?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A sticker sheet has 8 rows of 9 stickers. You give away 18 stickers. How many stickers are left? Explain using two easier multiplication facts.

WORK SPACE AND ANSWER

ANSWER KEY

Fact Detective

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 4 × 8 by doubling 2 × 8.	**32**
2	Find 9 × 6 using 10 × 6.	**54**
3	Find 5 × 9 by skip-counting by 5s.	**45**
4	Find 42 ÷ 6. Think: 6 × ___ = 42.	**7**
5	Find both products: 0 × 10 and 1 × 10.	**0 × 10 = 0; 1 × 10 = 10**
6	Find 64 ÷ 8 using a multiplication fact.	**8**

PART 2 · APPLY IT

1. **48 tokens** 6 × 8 = 48.
2. **9 cards** 5 × 9 = 45, so 45 ÷ 5 = 9.

CHALLENGE

54 stickers are left. Since 8 × 10 = 80 and 8 × 1 = 8, then 8 × 9 = 80 - 8 = 72. After giving away 18, there are 72 - 18 = 54 stickers left.

Accept other correct fact strategies. For the challenge, the explanation should use two easier multiplication facts to find 72 before subtracting 18.