LESSON MAKER PRO

Multiply It Out

Break apart two-digit numbers to find their product.

GRADE 4 · 4.NBT.5b

4.NBT.5b "Use strategies based on place value and the properties of multiplication to: Multiply a pair of two-digit numbers."

NAME _____ DATE _____

TENS AND ONES

Break each two-digit number into tens and ones. Multiply each part of one number by each part of the other, then add the four products.

WORKED EXAMPLE

Find 23 x 14.

1. Break apart the numbers: (20 + 3) x (10 + 4).
2. Multiply 20 x 10 = 200 and 20 x 4 = 80.
3. Multiply 3 x 10 = 30 and 3 x 4 = 12.
4. Add 200 + 80 + 30 + 12 = 322.

Answer: 322

PRACTICE 6 problems

1 Find 16 x 27.

ANSWER _____

2 Find 34 x 12.

ANSWER _____

3 Find 25 x 36.

ANSWER _____

4 Find 48 x 21.

ANSWER _____

5 Find 37 x 24.

ANSWER _____

6 Find 62 x 15.

ANSWER _____

APPLY IT Show your work

1 A game club has 18 packs of cards. Each pack has 26 cards. How many cards does the club have?

WORK SPACE

ANSWER _____

2 For a school show, students set up 32 rows of chairs with 17 chairs in each row. How many chairs do they set up?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A game store has 46 packs of stickers with 28 stickers in each pack. How many stickers are there? Explain how breaking apart both numbers helps you multiply.

WORK SPACE AND ANSWER

ANSWER KEY

Multiply It Out

GRADE 4 · 4.NBT.5b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 16 x 27.	**432**
2	Find 34 x 12.	**408**
3	Find 25 x 36.	**900**
4	Find 48 x 21.	**1,008**
5	Find 37 x 24.	**888**
6	Find 62 x 15.	**930**

PART 2 · APPLY IT

1. **468 cards** Multiply 18 x 26. The club has 468 cards.
2. **544 chairs** Multiply 32 x 17. The students set up 544 chairs.

CHALLENGE

Break 46 into 40 + 6 and 28 into 20 + 8, then find 800 + 320 + 120 + 48. The sum is 1,288 stickers.

Accept any correct place-value strategy for the challenge, including a different way to break apart the factors.