LESSON MAKER PRO

Close Enough Products

Use rounding to estimate multiplication.

GRADE 5 · 5.NOS.B.4.a

5.NOS.B.4.a "Apply estimation strategies to estimate products."

NAME _____ DATE _____

ROUND, THEN MULTIPLY

To estimate a product, round each factor to its greatest place value, then multiply. Keep a one-digit factor as it is. Your result is an estimate, not the exact product.

WORKED EXAMPLE

Estimate 243 × 56 by rounding each factor to its greatest place value.

1. Round 243 to 200.
2. Round 56 to 60.
3. Multiply: 200 × 60 = 12,000.

Answer: About 12,000

PRACTICE 6 problems

1 Round each factor to its greatest place value. Estimate 47 × 62.

ANSWER _____

2 Round each factor to its greatest place value. Estimate 83 × 29.

ANSWER _____

3 Round each factor to its greatest place value. Estimate 318 × 6.

ANSWER _____

4 Round each factor to its greatest place value. Estimate 274 × 41.

ANSWER _____

5 Round each factor to its greatest place value. Estimate 68 × 194.

ANSWER _____

6 Round each factor to its greatest place value. Estimate 596 × 23.

ANSWER _____

APPLY IT Show your work

1 A school club buys 74 packs of stickers. Each pack has 28 stickers. About how many stickers does the club buy? Round each factor to its greatest place value.

WORK SPACE

ANSWER _____

2 An online game gives 19 coins to each of 392 players. About how many coins does the game give away? Round each factor to its greatest place value.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A club orders 49 packs with 51 cards in each pack. Estimate the total in two ways: first, round each factor to the nearest ten; second, round each factor down to a multiple of ten. Which estimate is closer to the exact product? Show how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Close Enough Products

GRADE 5 · 5.NOS.B.4.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Round each factor to its greatest place value. Estimate 47 × 62.	**About 3,000**
2	Round each factor to its greatest place value. Estimate 83 × 29.	**About 2,400**
3	Round each factor to its greatest place value. Estimate 318 × 6.	**About 1,800**
4	Round each factor to its greatest place value. Estimate 274 × 41.	**About 12,000**
5	Round each factor to its greatest place value. Estimate 68 × 194.	**About 14,000**
6	Round each factor to its greatest place value. Estimate 596 × 23.	**About 12,000**

PART 2 · APPLY IT

1. **About 2,100 stickers** Round 74 to 70 and 28 to 30. Then multiply 70 × 30 = 2,100.
2. **About 8,000 coins** Round 19 to 20 and 392 to 400. Then multiply 20 × 400 = 8,000.

CHALLENGE

Nearest ten: 50 × 50 = 2,500. Round down: 40 × 50 = 2,000. The exact product is 49 × 51 = 2,499, so 2,500 is closer.

Accept estimates with or without the word “about.” For the challenge, accept any correct calculation or comparison showing that 2,500 is closer than 2,000.