

# Grade 4 · Multi-Digit Multiplication · Test

Common Core 4.NBT.B.5 · mathovore.fr

Name: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Score: \_\_\_\_\_

This 45-minute test checks multi-digit multiplication (4.NBT.B.5): up to four digits by one digit and two digits by two digits. It has nine questions worth 20 points. Show each partial product or other work so partial credit is possible. A calculator is not allowed.

## Test information

- **Grade:** Grade 4
- **Chapter:** Multi-Digit Multiplication
- **Common Core:** 4.NBT.B.5
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 2 pts; Question 3: 2 pts; Question 4: 2 pts; Question 5: 2 pts; Question 6: 2 pts; Question 7: 3 pts; Question 8: 3 pts; Question 9: 2 pts)

## Question 1: Find the products (2 points)

- Find  $7 \times 4,368$ . (1 point)
- Find  $63 \times 85$ . (1 point)

## Question 2: Area model (2 points)

The area model shows  $46 \times 37$  with its sides split by place value. Find the four partial products and the total.

|    |    |   |
|----|----|---|
|    | 40 | 6 |
| 30 | ?  | ? |
| 7  | ?  | ? |

Area model for  $46 \times 37$ .

## Question 3: Partial products (2 points)

Find  $8 \times 3,206$ . Show each partial product.

#### Question 4: Priya's mistake (2 points)

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Priya found  $6 \times 508$  by adding  $6 \times 50 = 300$  and  $6 \times 8 = 48$ , and wrote 348. Explain her mistake and find the correct product.

#### Question 5: Estimate and exact (2 points)

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- a. Estimate  $49 \times 62$  by rounding each factor to the nearest ten. (1 point)
- b. Find the exact product. (1 point)

#### Question 6: Properties (2 points)

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Find  $5 \times 17 \times 2$  using a strategy that avoids a hard multiplication, and name the property you used.

#### Question 7: Team baseballs (3 points)

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A league has 18 teams with 14 players on each team.

|    |    |   |
|----|----|---|
|    | 10 | 8 |
| 10 | ?  | ? |
| 4  | ?  | ? |

Area model for  $18 \times 14$ .

- a. Find the number of players. (1 point)
- b. Each player gets 3 baseballs. Find the total number of baseballs. (2 points)

#### Question 8: Two stadiums (3 points)

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Stadium A has 6 sections with 2,475 seats in each section. Stadium B has 14,520 seats. Find which stadium has more seats and how many more.

| Stadium A seats |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|
| 2,475           | 2,475 | 2,475 | 2,475 | 2,475 | 2,475 |

Stadium A: 6 equal sections.

### Question 9: Multiples of ten (2 points)

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- a. Find  $20 \times 60$ . (1 point)
- b. Find  $90 \times 50$ . (1 point)