

Grade 4 · Multi-Digit Multiplication · Quiz

Common Core 4.NBT.B.5 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

Ten multiple-choice questions check partial products, area models, and word problems for multi-digit multiplication (4.NBT.B.5). Pick the one correct answer for each question. Read the explanation after you answer to see the typical mistake behind each wrong choice.

Grade 4 Common Core: 4.NBT.B.5

Questions

Question 1

What is $4 \times 2,315$?

- A. 8,260
- B. 9,060
- C. 9,260
- D. 9,360

Question 2

What is 7×306 ?

- A. 2,112
- B. 2,142
- C. 742
- D. 2,152

Question 3

The area model shows two factors split by place value. What is the product?



Area model for 24×13 .

- A. 272
- B. 252

- C. 412
- D. 312

Question 4

What is 52×41 ?

- A. 2,032
- B. 2,232
- C. 2,132
- D. 93

Question 5

Which expression shows the partial products of 36×8 ?

- A. $30 \times 8 + 6 \times 8$
- B. $30 \times 8 + 6$
- C. $3 \times 8 + 6 \times 8$
- D. $30 + 6 \times 8$

Question 6

A bakery sells 108 muffins each day. How many muffins does it sell in 15 days?

- A. 1,620
- B. 1,080
- C. 1,520
- D. 123

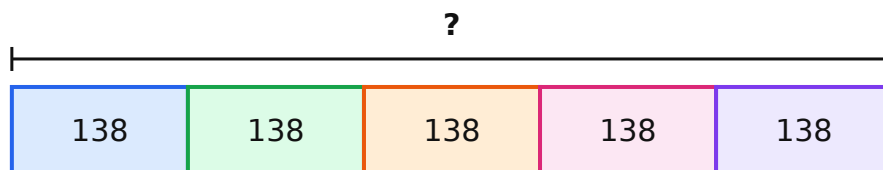
Question 7

Which product is equal to $4 \times 25 \times 9$?

- A. 130
- B. 900
- C. 1,000
- D. 225

Question 8

A tape diagram shows 5 equal parts of 138. What is the total?



Five equal parts of 138.

- A. 143
- B. 640
- C. 590
- D. 690

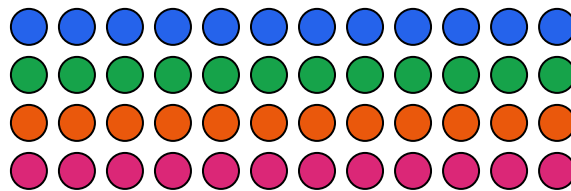
Question 9

What is 40×70 ?

- A. 280
- B. 110
- C. 2,800
- D. 28,000

Question 10

An array has 4 rows. Each row has 12 dots. Which equation gives the total number of dots?



4 rows of 12 dots.

- A. $4 + 12 = 16$
- B. $12 \times 12 = 144$
- C. $4 \times 10 = 40$
- D. $4 \times 12 = 48$

Answer key

1. **C** - $4 \times 2,000 = 8,000$; $4 \times 300 = 1,200$; $4 \times 10 = 40$; $4 \times 5 = 20$. The sum is 9,260. Leaving out the 1,200 gives wrong totals.
2. **B** - $7 \times 300 = 2,100$ and $7 \times 6 = 42$, so the product is 2,142. The zero in the tens place must not be skipped.
3. **D** - $200 + 60 + 40 + 12 = 312$. Leaving out the 40 gives 272.
4. **C** - $50 \times 40 = 2,000$, $50 \times 1 = 50$, $2 \times 40 = 80$, $2 \times 1 = 2$. The sum is 2,132.
5. **A** - Split 36 into $30 + 6$ and multiply each part by 8. The other choices multiply only one part or use the wrong place value.
6. **A** - $108 \times 15 = 1,080 + 540 = 1,620$. Adding $108 + 15$ gives 123.
7. **B** - $4 \times 25 = 100$ and $100 \times 9 = 900$. This uses the associative property.
8. **D** - $5 \times 138 = 500 + 150 + 40 = 690$. Adding $5 + 138$ gives 143.
9. **C** - $4 \times 7 = 28$, and two tens make two zeros: 2,800.
10. **D** - 4 rows of 12 gives $4 \times 12 = 48$ dots. Adding $4 + 12$ mistakes the structure for addition.

Remember:

- Split each factor by place value: $24 = 20 + 4$.
- Multiply every part by every part to get partial products.
- Add all partial products to find the total.
- An area model shows each partial product as a rectangle.
- Estimate with rounded factors to check the answer.