

# Grade 5 - Multiplying Multi-Digit Whole Numbers - Worksheet

Common Core 5.NBT.B.5 · [maths-pdf.fr/en/](https://maths-pdf.fr/en/)

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

These 20 problems build fluency with multiplying multi-digit whole numbers (Common Core 5.NBT.B.5). You will use the standard algorithm, estimate products, spot mistakes and use area models to see why partial products work.

Start with one-digit and two-digit factors. The last six problems are word problems with more than one step. Estimate before you multiply, and check your answer against your estimate.

**Grade 5** · Common Core State Standards: **5.NBT.B.5**

## Exercise 1 - Two digits by one digit

Find the product:  $47 \times 6$ .

## Exercise 2 - Three digits by one digit

Find the product:  $358 \times 7$ .

## Exercise 3 - Multiply by a multiple of ten

Find the product:  $63 \times 40$ .

## Exercise 4 - Area model 34 times 26

Find  $34 \times 26$ . Use the area model to fill in the four partial products.

|    |    |   |
|----|----|---|
|    | 30 | 4 |
| 20 | ?  | ? |
| 6  | ?  | ? |

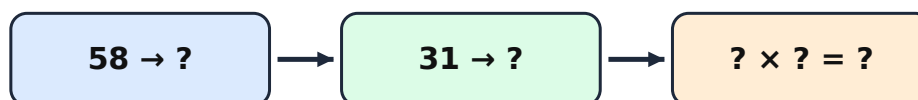
Fill each box.

### Exercise 5 - Two digits by two digits

Find the product:  $78 \times 45$ .

### Exercise 6 - Estimate first

Estimate  $58 \times 31$  by rounding each factor to its greatest place. Then find the exact product.



Fill in the blanks.

### Exercise 7 - Three digits by two digits

Find the product:  $246 \times 35$ .

### Exercise 8 - Zero in the middle

Find the product:  $507 \times 28$ .

### Exercise 9 - Larger factors

Find the product:  $689 \times 47$ .

### Exercise 10 - Zeros in a factor

Find the product:  $250 \times 36$ .

### Exercise 11 - Three digits by three digits

Find the product:  $314 \times 215$ .

### Exercise 12 - Four digits by two digits

Find the product:  $1,486 \times 32$ .

### Exercise 13 - Draw an area model

Use the area model to find  $52 \times 37$ .

|    |  |    |   |
|----|--|----|---|
|    |  | 50 | 2 |
| 30 |  | ?  | ? |
| 7  |  | ?  | ? |

Fill each box.

### Exercise 14 - Jamal's mistake

Jamal finds  $45 \times 23$  this way:  $45 \times 3 = 135$ ,  $45 \times 2 = 90$ , and  $135 + 90 = 225$ . Explain his mistake and find the correct product.

### Exercise 15 - Orange crates

A farmers market stand sells 36 crates of oranges. Each crate holds 48 oranges. How many oranges are there?

|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |
| 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |

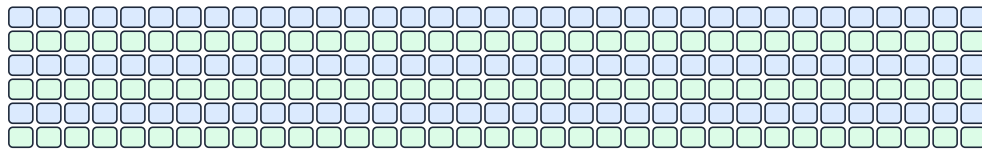
Each crate holds 48 oranges.

### Exercise 16 - Road trip miles

On a road trip, a bus drives 62 miles each hour for 14 hours. How many miles does the bus drive?

### Exercise 17 - Auditorium seats

The school auditorium has 28 rows. Each row has 35 seats. How many seats are in the auditorium?



35 seats in each row, 28 rows (only 6 rows are drawn).

### Exercise 18 - Bake sale money

Sofia bakes 15 trays of cookies with 24 cookies on each tray. She sells every cookie for \$2. How many cookies does she bake, and how much money does she earn?

### Exercise 19 - Water bottles

A Little League has 12 teams. Each team has 14 players. Every player gets 3 water bottles. How many water bottles does the league give out?

### Exercise 20 - Marker boxes

Priya's school buys 125 boxes with 24 markers each and 36 boxes with 15 markers each. How many markers does the school buy in all?