

# Word Problems: Multiplication and Division

Grade 5 Math • Section 2.4

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_ / 10

## Quick Review and Helpful Hints

- 👉 **Multiplication clues:** “each,” “every,” “per,” “times,” “total of equal groups.”
- 👉 **Division clues:** “split equally,” “share,” “how many groups,” “how many in each.”
- 💡 Read the problem twice. Identify the operation **before** you compute. Estimate to check your answer.

🔍 **Example:** A farm has 23 rows of apple trees with 18 trees in each row. Each tree produces about 85 apples. How many apples does the farm produce?

👉 First find the total number of trees:  $23 \times 18 = 414$  trees. Then multiply by the apples per tree:  $414 \times 85 = 35,190$ . Check:  $400 \times 85 = 34,000$ , which is close. ✓

💡 **Answer:** 35,190 apples

## Practice Problems

Solve each word problem. Show your work.

1. A library has 36 shelves. Each shelf holds 48 books. How many books in total? \_\_\_\_\_
2. A school has 1,260 students split equally into 28 classes. How many students per class? \_\_\_\_\_
3. A farmer harvests 5,472 pounds of grain and divides it equally among 18 trucks. How many pounds go in each truck? \_\_\_\_\_
4. A store orders 15 cartons of juice. Each carton has 24 bottles. Each bottle costs \$3. What is the total cost? \_\_\_\_\_
5. A printer prints 175 pages per minute. How many pages can it print in 24 minutes? \_\_\_\_\_
6. A baker has 2,160 muffins to place into boxes of 12. How many boxes are needed? \_\_\_\_\_
7. An auditorium has 52 rows with 34 seats each. For a concert, 1,250 tickets are sold. How many seats are empty? \_\_\_\_\_
8. A truck driver travels 65 miles each hour. How far does she travel in 14 hours? \_\_\_\_\_

## Word Problems

9. A warehouse stores 8,640 cans in crates of 36. Then 72 crates are shipped out. How many cans remain? \_\_\_\_\_
10. A school district buys 48 computers at \$675 each and 48 monitors at \$225 each. What is the total cost? \_\_\_\_\_



## Answer Keys

- |            |              |
|------------|--------------|
| 1. 1,728   | 6. 180       |
| 2. 45      | 7. 518       |
| 3. 304     | 8. 910       |
| 4. \$1,080 | 9. 6,048     |
| 5. 4,200   | 10. \$43,200 |

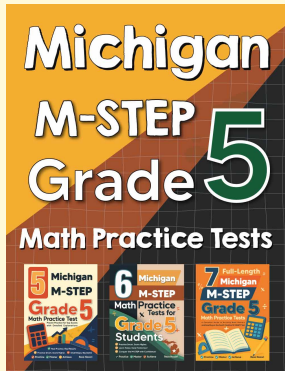
### Step-by-Step Explanations

- Start with the main idea. For multiplication and division,  $36 \times 48 = 1,728$  books. Write the given information first, then choose the operation that matches the situation.
- Keep the work tidy. For multiplication and division,  $1,260 \div 28 = 45$  students per class. A quick estimate helps confirm that the final answer is reasonable.
- Look at what the numbers mean. For multiplication and division,  $5,472 \div 18 = 304$  pounds per truck. The explanation should show both the computation and why that computation fits the problem.
- Use the setup first. For multiplication and division, there are  $15 \times 24 = 360$  bottles, and  $360 \times 3 = 1,080$ . Write the given information first, then choose the operation that matches the situation.
- Check the size of the answer. For multiplication and division,  $175 \times 24 = 4,200$  pages. A quick estimate helps confirm that the final answer is reasonable.
- Match the operation to the words. For multiplication and division,  $2,160 \div 12 = 180$  boxes. The explanation should show both the computation and why that computation fits the problem.
- Write the important values first. For multiplication and division, seats:  $52 \times 34 = 1,768$ ; empty seats:  $1,768 - 1,250 = 518$ . Write the given information first, then choose the operation that matches the situation.
- Follow the pattern carefully. For multiplication and division,  $65 \times 14 = 910$  miles. A quick estimate helps confirm that the final answer is reasonable.
- Start with the main idea. For multiplication and division,  $8,640 \div 36 = 240$  crates;  $240 - 72 = 168$  crates remain;  $168 \times 36 = 6,048$  cans. The explanation should show both the computation and why that computation fits the problem.
- Keep the work tidy. For multiplication and division, each computer-monitor set costs  $675 + 225 = 900$ ;  $48 \times 900 = 43,200$ . Write the given information first, then choose the operation that matches the situation.



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