

# Multiplying and Dividing Decimals

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

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

Score: \_\_\_\_\_ / 18

## Quick Review and Helpful Hints

To *multiply* decimals, ignore the points and multiply like whole numbers, then place the decimal point so the answer has as many decimal places as the two factors combined. To *divide*, shift the divisor's point to make it a whole number, shift the dividend's point the same number of places, and divide.

▷ **Example:** Multiply  $0.6 \times 0.4$ . **Work:** Ignore the points:  $6 \times 4 = 24$ . The factors have  $1 + 1 = 2$  decimal places, so place the point two spots in. ★ **Answer:** 0.24

$$0.6 \times 0.4$$

↓

$$6 \times 4 = 24$$

$$\Rightarrow 0.24$$

$1 + 1 = 2$  decimal places.

## ◆ Practice Problems

Multiply or divide.

1.  $0.2 \times 0.3$

\_\_\_\_\_

2.  $0.5 \times 0.4$

\_\_\_\_\_

3.  $1.2 \times 0.3$

\_\_\_\_\_

4.  $0.7 \times 6$

\_\_\_\_\_

5.  $2.5 \times 0.4$

\_\_\_\_\_

6.  $0.9 \times 0.9$

\_\_\_\_\_

7.  $3.6 \div 0.6$

\_\_\_\_\_

8.  $4.8 \div 0.4$

\_\_\_\_\_

9.  $0.25 \times 4$

\_\_\_\_\_

10.  $1.5 \times 1.5$

\_\_\_\_\_

11.  $0.08 \times 5$

\_\_\_\_\_

12.  $7.2 \div 0.9$

\_\_\_\_\_

13.  $0.6 \times 0.05$

\_\_\_\_\_

14.  $9.6 \div 0.8$

\_\_\_\_\_

## ◆ Word Problems

15. Three notebooks cost \$2.50 each. What is the total cost?

\_\_\_\_\_

16. A \$12.60 bill is split equally among 6 people. How much does each pay?

\_\_\_\_\_

17. Apples cost \$4.40 per pound. What is the cost of 0.5 pound?

\_\_\_\_\_

18. A track lap is 0.7 mile. How many laps make 8.4 miles?

\_\_\_\_\_



## Answer Keys

- |                                      |                                       |  |
|--------------------------------------|---------------------------------------|--|
| 1. <input type="text" value="0.06"/> | 7. <input type="text" value="6"/>     | 13. <input type="text" value="0.03"/>    |
| 2. <input type="text" value="0.2"/>  | 8. <input type="text" value="12"/>    | 14. <input type="text" value="12"/>      |
| 3. <input type="text" value="0.36"/> | 9. <input type="text" value="1"/>     | 15. <input type="text" value="\$7.50"/>  |
| 4. <input type="text" value="4.2"/>  | 10. <input type="text" value="2.25"/> | 16. <input type="text" value="\$2.10"/>  |
| 5. <input type="text" value="1"/>    | 11. <input type="text" value="0.4"/>  | 17. <input type="text" value="\$2.20"/>  |
| 6. <input type="text" value="0.81"/> | 12. <input type="text" value="8"/>    | 18. <input type="text" value="12 laps"/> |

### Step-by-Step Explanations

1. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Ignore the points and multiply:  $2 \times 3 = 6$ . The factors have  $1 + 1 = 2$  decimal places, so place the point two spots in: 0.06. So the final answer is 0.06.
2. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $5 \times 4 = 20$ , with 2 decimal places: 0.20, which is 0.2. So the final answer is 0.2.
3. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $12 \times 3 = 36$ , with 2 decimal places: 0.36. So the final answer is 0.36.
4. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $7 \times 6 = 42$ , with 1 decimal place: 4.2. So the final answer is 4.2.
5. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $25 \times 4 = 100$ , with 2 decimal places: 1.00, which is 1. So the final answer is 1.
6. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $9 \times 9 = 81$ , with 2 decimal places: 0.81. So the final answer is 0.81.
7. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Make the divisor whole by moving both points one place:  $36 \div 6 = 6$ . So the final answer is 6.
8. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Move both points one place:  $48 \div 4 = 12$ . So the final answer is 12.
9. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $25 \times 4 = 100$ , with 2 decimal places: 1.00 = 1. So the final answer is 1.
10. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $15 \times 15 = 225$ , with 2 decimal places: 2.25. So the final answer is 2.25.
11. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $8 \times 5 = 40$ , with 2 decimal places: 0.40 = 0.4. So the final answer is 0.4.
12. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Move both points one place:  $72 \div 9 = 8$ . So the final answer is 8.
13. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $6 \times 5 = 30$ , with  $1 + 2 = 3$  decimal places: 0.030 = 0.03. So the final answer is 0.03.
14. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Move both points one place:  $96 \div 8 = 12$ . So the final answer is 12.
15. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Multiply the price by the quantity:  $2.50 \times 3 = \$7.50$ . So the final answer is \$7.50.
16. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Divide the bill among the people:  $12.60 \div 6 = \$2.10$  each. So the final answer is \$2.10.
17. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Multiply the cost per pound by the weight:  $4.40 \times 0.5 = \$2.20$ . So the final answer is \$2.20.
18. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Divide the distance by the lap length:  $8.4 \div 0.7$ ; moving both points gives  $84 \div 7 = 12$  laps. So the final answer is 12 laps.



## Want Even More TSIA2 Math Practice?



### The Most Comprehensive TSIA2 Math Preparation Bundle

Prep books, workbooks, and full-length practice tests

Complete review, detailed explanations, and realistic test practice



Scan Me

Prep Books  
Workbooks  
Practice Tests

**Important:** These TSIA2 Math resources are made for extra practice after the worksheet. Scan the QR code above for the complete TSIA2 Math preparation bundle.

#### Skill Review

- ✓ Builds number sense, algebra, geometry, and data skills
- ✓ Supports steady review before the TSIA2 test
- ✓ Great for tutoring, homework, and independent practice

**Build the foundation.**

#### Test Practice

- ✓ Full-length practice tests for realistic pacing
- ✓ Detailed answer explanations for every question
- ✓ Useful after students finish topic worksheets

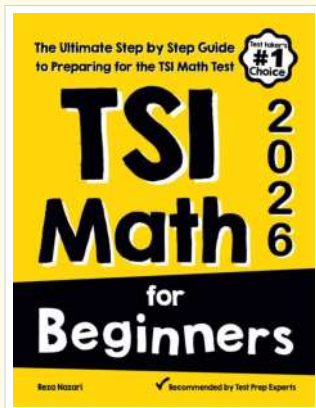
**Practice with purpose.**

#### Confidence

- ✓ Turns mistakes into targeted review
- ✓ Helps students see progress over time
- ✓ Keeps TSIA2 preparation organized and calm

**Move forward prepared.**

### STUDENT FAVORITE • Master TSIA2 Math From the Ground Up



#### TSI Math for Beginners

*The Ultimate Step-by-Step Guide to Preparing for the TSI Math Test*

Written by a top math teacher and aligned with the latest TSIA2 Math test. From fractions and percents to algebra and geometry — explained the easy way.

- ✓ **Complete coverage** of every TSIA2 Math topic — perfect companion to these worksheets
- ✓ **Step-by-step explanations** with worked examples on every topic
- ✓ **QR codes in every chapter** for free video lessons & bonus practice
- ✓ **2 full-length practice tests** with detailed answer keys
- ✓ Perfect for self-study or the classroom

\* **STUDENT'S #1 CHOICE**

Teacher-recommended • trusted TSIA2

prep

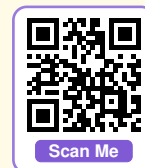
→ **DOWNLOAD INSTANTLY**



Scan Me

Instant download • any device

□ **FIND ON AMAZON**



Scan Me

Paperback on Amazon

Pair these free worksheets with *TSI Math for Beginners* and you have a complete self-paced TSIA2 Math path — concept lessons, daily practice, and full exam-style reviews. → [EffortlessMath.com](https://www.EffortlessMath.com)