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 0.6×0.4. **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

$$0.6 \times 0.4 \downarrow 6 \times 4 = 24 \Rightarrow 0.24$$

$1 + 1 = 2$ decimal places.

Practice Problems

Multiply or divide.

1. 0.2×0.3 _____

2. 0.5×0.4 _____

3. 1.2×0.3 _____

4. 0.7×6 _____

5. 2.5×0.4 _____

6. 0.9×0.9 _____

7. $3.6 \div 0.6$ _____

8. $4.8 \div 0.4$ _____

9. 0.25×4 _____

10. 1.5×1.5 _____

11. 0.08×5 _____

12. $7.2 \div 0.9$ _____

13. 0.6×0.05 _____

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. 0.06	**7.** 6	**13.** 0.03
2. 0.2	**8.** 12	**14.** 12
3. 0.36	**9.** 1	**15.** $\$7.50$
4. 4.2	**10.** 2.25	**16.** $\$2.10$
5. 1	**11.** 0.4	**17.** $\$2.20$
6. 0.81	**12.** 8	**18.** 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 $\$7.50$.

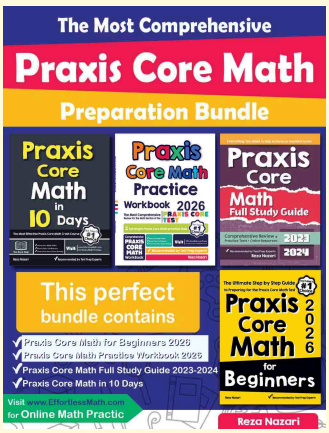
16. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is Divide the bill among the people: $12.60 \div 6 = \$2.10$ each. So the final answer is $\$2.10$.

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.

Keep Building Praxis Core Math Skills

Recommended Effortless Math resources



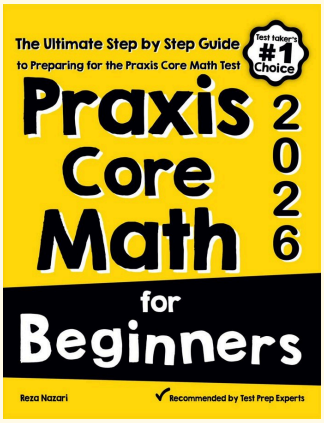
The Most Comprehensive Praxis Core Math Preparation Bundle

Use the complete Praxis Core Math resource for review, worked examples, extra practice, and test-style questions after each worksheet.

Scan Me

Download Instantly

STUDENT FAVORITE - Praxis Core Math for Beginners



Praxis Core Math for Beginners 2026

Step-by-step lessons, topic practice, and full review support for students who want a calm path through Praxis Core Math preparation.

A strong companion for self-study, tutoring, homework, and targeted review.

PDF Edition

Scan Me

Download Instantly

For more Praxis Core Math prep, visit EffortlessMath.com/Praxis-Core