

# Dividing Decimals by Whole Numbers

Grade 5 Math • Section 7.4

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

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

Score: \_\_\_\_\_ / 17

## Quick Review and Helpful Hints

**Steps:** (1) Place the decimal point in the quotient directly above the decimal in the dividend. (2) Divide as with whole numbers. (3) Add zeros after the decimal if needed.

**Lightbulb:**  $4.56 \div 3$ : divide normally. Put the decimal in the answer above the decimal in 4.56.  $4.56 \div 3 = 1.52$ .

**Warning:** If the divisor doesn't go into the first digit, place a 0 in the quotient and continue.

**Example:** Find  $7.68 \div 4$ .

**Steps:** 4 goes into 7 once (remainder 3). Bring down 6:  $36 \div 4 = 9$ . Bring down 8:  $8 \div 4 = 2$ . Answer: 1.92.

**Lightbulb:** Answer: 1.92

## Practice Problems

Divide.

- |                          |                            |                            |
|--------------------------|----------------------------|----------------------------|
| 1. $8.4 \div 3 =$ _____  | 6. $15.6 \div 8 =$ _____   | 11. $10.8 \div 6 =$ _____  |
| 2. $6.25 \div 5 =$ _____ | 7. $3.15 \div 9 =$ _____   | 12. $0.945 \div 9 =$ _____ |
| 3. $9.36 \div 4 =$ _____ | 8. $27.5 \div 5 =$ _____   | 13. $50.4 \div 8 =$ _____  |
| 4. $14.7 \div 7 =$ _____ | 9. $0.216 \div 3 =$ _____  | 14. $2.52 \div 4 =$ _____  |
| 5. $0.48 \div 6 =$ _____ | 10. $4.32 \div 12 =$ _____ | 15. $7.56 \div 7 =$ _____  |

## Word Problems

16. A rope that is 15.6 meters long is cut into 8 equal pieces. How long is each piece?

\_\_\_\_\_

17. Five friends equally share a bill of \$42.75. How much does each person pay?

\_\_\_\_\_



## Answer Keys

- |                                       |   |
|---------------------------------------|---|
| 1. <input type="text" value="2.8"/>   | 10. <input type="text" value="0.36"/>   |
| 2. <input type="text" value="1.25"/>  | 11. <input type="text" value="1.8"/>    |
| 3. <input type="text" value="2.34"/>  | 12. <input type="text" value="0.105"/>  |
| 4. <input type="text" value="2.1"/>   | 13. <input type="text" value="6.3"/>    |
| 5. <input type="text" value="0.08"/>  | 14. <input type="text" value="0.63"/>   |
| 6. <input type="text" value="1.95"/>  | 15. <input type="text" value="1.08"/>   |
| 7. <input type="text" value="0.35"/>  | 16. <input type="text" value="1.95 m"/> |
| 8. <input type="text" value="5.5"/>   | 17. <input type="text" value="\$8.55"/> |
| 9. <input type="text" value="0.072"/> |   |

### Step-by-Step Explanations

1. Start with the main idea. For dividing decimals by whole numbers, line up the decimal values and compute  $8.4 \div 3 = 2.8$ . Write the given information first, then choose the operation that matches the situation.
2. Keep the work tidy. For dividing decimals by whole numbers, line up the decimal values and compute  $6.25 \div 5 = 1.25$ . A quick estimate helps confirm that the final answer is reasonable.
3. Look at what the numbers mean. For dividing decimals by whole numbers, line up the decimal values and compute  $9.36 \div 4 = 2.34$ . The explanation should show both the computation and why that computation fits the problem.
4. Use the setup first. For dividing decimals by whole numbers, line up the decimal values and compute  $14.7 \div 7 = 2.1$ . Write the given information first, then choose the operation that matches the situation.
5. Check the size of the answer. For dividing decimals by whole numbers, line up the decimal values and compute  $0.48 \div 6 = 0.08$ . A quick estimate helps confirm that the final answer is reasonable.
6. Match the operation to the words. For dividing decimals by whole numbers, line up the decimal values and compute  $15.6 \div 8 = 1.95$ . The explanation should show both the computation and why that computation fits the problem.
7. Write the important values first. For dividing decimals by whole numbers, line up the decimal values and compute  $3.15 \div 9 = 0.35$ . Write the given information first, then choose the operation that matches the situation.
8. Follow the pattern carefully. For dividing decimals by whole numbers, line up the decimal values and compute  $27.5 \div 5 = 5.5$ . A quick estimate helps confirm that the final answer is reasonable.
9. Start with the main idea. For dividing decimals by whole numbers, line up the decimal values and compute  $0.216 \div 3 = 0.072$ . The explanation should show

both the computation and why that computation fits the problem.

10. Keep the work tidy. For dividing decimals by whole numbers, line up the decimal values and compute  $4.32 \div 12 = 0.36$ . Write the given information first, then choose the operation that matches the situation.
11. Look at what the numbers mean. For dividing decimals by whole numbers, line up the decimal values and compute  $10.8 \div 6 = 1.8$ . A quick estimate helps confirm that the final answer is reasonable.
12. Use the setup first. For dividing decimals by whole numbers, line up the decimal values and compute  $0.945 \div 9 = 0.105$ . The explanation should show both the computation and why that computation fits the problem.
13. Check the size of the answer. For dividing decimals by whole numbers, line up the decimal values and compute  $50.4 \div 8 = 6.3$ . Write the given information first, then choose the operation that matches the situation.
14. Match the operation to the words. For dividing decimals by whole numbers, line up the decimal values and compute  $2.52 \div 4 = 0.63$ . A quick estimate helps confirm that the final answer is reasonable.
15. Write the important values first. For dividing decimals by whole numbers, line up the decimal values and compute  $7.56 \div 7 = 1.08$ . The explanation should show both the computation and why that computation fits the problem.
16. Follow the pattern carefully. For dividing decimals by whole numbers, divide the rope length by 8:  $15.6 \div 8 = 1.95$  m. Write the given information first, then choose the operation that matches the situation.
17. Start with the main idea. For dividing decimals by whole numbers, divide the bill equally:  $42.75 \div 5 = 8.55$ . A quick estimate helps confirm that the final answer is reasonable.



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