

Dividing Whole Numbers by Unit Fractions

Grade 5 Math • Section 6.2

Name: _____

Date: _____

Score: _____ / 17

Quick Review and Helpful Hints

Rule: $c \div \frac{1}{b} = c \times b$. Dividing by a unit fraction is the same as multiplying by its denominator.

Think: “How many $\frac{1}{b}$ -sized pieces fit into c ?” $3 \div \frac{1}{4}$: how many fourths in 3 wholes? $3 \times 4 = 12$.

The answer is larger than the starting number.

Example: Find $5 \div \frac{1}{3}$.

How many $\frac{1}{3}$ -sized pieces fit into 5 wholes? $5 \times 3 = 15$. So $5 \div \frac{1}{3} = 15$.

Answer: 15

Practice Problems

Divide.

1. $2 \div \frac{1}{3} =$ _____

6. $8 \div \frac{1}{3} =$ _____

11. $4 \div \frac{1}{10} =$ _____

2. $4 \div \frac{1}{5} =$ _____

7. $5 \div \frac{1}{8} =$ _____

12. $12 \div \frac{1}{3} =$ _____

3. $3 \div \frac{1}{4} =$ _____

8. $10 \div \frac{1}{4} =$ _____

13. $6 \div \frac{1}{8} =$ _____

4. $6 \div \frac{1}{2} =$ _____

9. $9 \div \frac{1}{5} =$ _____

14. $3 \div \frac{1}{6} =$ _____

5. $7 \div \frac{1}{6} =$ _____

10. $1 \div \frac{1}{7} =$ _____

15. $15 \div \frac{1}{2} =$ _____

Word Problems

16. A board is 6 feet long. It is cut into pieces that are each $\frac{1}{4}$ foot long. How many pieces are there? _____

17. A container holds 3 gallons of juice. Cups hold $\frac{1}{8}$ gallon each. How many cups can be filled? _____



Answer Keys

- | | |
|-------|--------|
| 1. 6 | 10. 7 |
| 2. 20 | 11. 40 |
| 3. 12 | 12. 36 |
| 4. 12 | 13. 48 |
| 5. 42 | 14. 18 |
| 6. 24 | 15. 30 |
| 7. 40 | 16. 24 |
| 8. 40 | 17. 24 |
| 9. 45 | |

Step-by-Step Explanations

- Start with the main idea. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 6. Fractions are easier to combine when the pieces are the same size.
- Keep the work tidy. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 20. Always simplify at the end so the answer is clean and useful.
- Look at what the numbers mean. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 12. For mixed numbers, converting to improper fractions can make the arithmetic calmer.
- Use the setup first. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 12. Fractions are easier to combine when the pieces are the same size.
- Check the size of the answer. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 42. Always simplify at the end so the answer is clean and useful.
- Match the operation to the words. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 24. For mixed numbers, converting to improper fractions can make the arithmetic calmer.
- Write the important values first. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 40. Fractions are easier to combine when the pieces are the same size.
- Follow the pattern carefully. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 40. Always simplify at the end so the answer is clean and useful.
- Start with the main idea. For dividing whole numbers by unit fractions, di-

vide by multiplying by the reciprocal, then simplify. The result is 45. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

10. Keep the work tidy. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 7. Fractions are easier to combine when the pieces are the same size.

11. Look at what the numbers mean. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 40. Always simplify at the end so the answer is clean and useful.

12. Use the setup first. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 36. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

13. Check the size of the answer. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 48. Fractions are easier to combine when the pieces are the same size.

14. Match the operation to the words. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 18. Always simplify at the end so the answer is clean and useful.

15. Write the important values first. For dividing whole numbers by unit fractions, divide by multiplying by the reciprocal, then simplify. The result is 30. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

16. Follow the pattern carefully. For dividing whole numbers by unit fractions, each piece is $\frac{1}{4}$ foot, so $6 \div \frac{1}{4} = 6 \times 4 = 24$. Fractions are easier to combine when the pieces are the same size.

17. Start with the main idea. For dividing whole numbers by unit fractions, each cup is $\frac{1}{8}$ gallon, so $3 \div \frac{1}{8} = 3 \times 8 = 24$ cups. Always simplify at the end so the answer is clean and useful.



Want Even More Practice?

Check Out Our Other Washington Smarter Balanced Test Books!



7 Washington Smarter Balanced Grade 5 Math Practice Tests

7 full-length Grade 5 math practice tests with detailed explanations
Verified live product page for this state or program.



**7 Tests
Detailed
Explanations**

Important: Use the QR code for the verified live product page. Practice-test availability can vary by state or program, so this worksheet links to the strongest matching live Grade 5 math resource.

Targeted Review

- ✓ Focused Grade 5 math practice by tested skill
- ✓ Clear question formats for steady review
- ✓ Useful for homework, tutoring, and test prep
- ✓ Helps students find gaps before test day

Review the essentials first.

7 Practice Tests

- ✓ 7 complete practice tests for realistic preparation
- ✓ Detailed explanations support independent study
- ✓ Aligned with the selected state or program
- ✓ Strong fit for students who need more test-style practice

Build test stamina with full practice.

Confidence Builder

- ✓ Mixes skill review with test-taking practice
- ✓ Helps parents and teachers track readiness
- ✓ Encourages consistent practice over time
- ✓ Gives students a clearer path to mastery

Practice with purpose.