

Fractions as Division

Grade 5 Math • Section 5.1

Name: _____

Date: _____

Score: _____ / 14

Quick Review and Helpful Hints

Key idea: $\frac{a}{b} = a \div b$. A fraction represents division of the numerator by the denominator.

$\frac{3}{4}$ means $3 \div 4 = 0.75$. This also means sharing 3 items equally among 4 people — each gets $\frac{3}{4}$.

The denominator tells how many equal parts; the numerator tells how many parts are used.

Example: Five friends share 3 sandwiches equally. How much does each person get?

We divide 3 sandwiches among 5 people: $3 \div 5 = \frac{3}{5}$. Each person gets $\frac{3}{5}$ of a sandwich.

Answer: $\frac{3}{5}$ of a sandwich

Practice Problems

Write each division as a fraction and each fraction as a division.

1. $1 \div 4 =$ _____

7. $11 \div 3 =$ _____

2. $3 \div 8 =$ _____

8. $2 \div 9 =$ _____

3. $7 \div 10 =$ _____

9. $8 \div 5 =$ _____

4. $5 \div 6 =$ _____

10. $\frac{15}{4} =$ _____ \div _____

5. $\frac{9}{2} =$ _____ \div _____

11. If 4 pizzas are shared equally among 6 friends, each gets _____.

6. $\frac{4}{7} =$ _____ \div _____

12. $10 \div 3 =$ _____

Word Problems

13. Eight students share 5 granola bars equally. Write a division expression and a fraction to show how much each student gets.

14. A 7-foot piece of rope is cut into 12 equal pieces. What fraction of a foot is each piece? Write as a fraction and as a decimal (rounded to hundredths).



Answer Keys

1. $\frac{1}{4}$

2. $\frac{3}{8}$

3. $\frac{7}{10}$

4. $\frac{5}{6}$

5. $9 \div 2$

6. $4 \div 7$

7. $3\frac{2}{3}$

8. $\frac{2}{9}$

9. $1\frac{3}{5}$

10. $15 \div 4$

11. $\frac{4}{6} = \frac{2}{3}$ pizza

12. $3\frac{1}{3}$

13. $5 \div 8 = \frac{5}{8}$

14. $\frac{7}{12} \approx 0.58$

Step-by-Step Explanations

1. Start with the main idea. For fractions as division, $1 \div 4$ means 1 shared into 4 equal parts. Fractions are easier to combine when the pieces are the same size.

2. Keep the work tidy. For fractions as division, $3 \div 8 = \frac{3}{8}$. Always simplify at the end so the answer is clean and useful.

3. Look at what the numbers mean. For fractions as division, $7 \div 10 = \frac{7}{10}$. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

4. Use the setup first. For fractions as division, $5 \div 6 = \frac{5}{6}$. Fractions are easier to combine when the pieces are the same size.

5. Check the size of the answer. For fractions as division, the numerator is the dividend and the denominator is the divisor. Always simplify at the end so the answer is clean and useful.

6. Match the operation to the words. For fractions as division, the fraction $\frac{4}{7}$ means 4 divided by 7. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

7. Write the important values first. For fractions as division, $11 \div 3 = \frac{11}{3} = 3\frac{2}{3}$. Fractions are easier to combine when the pieces are the same size.

8. Follow the pattern carefully. For fractions as division, $2 \div 9 = \frac{2}{9}$. Always simplify at the end so the answer is clean and useful.

9. Start with the main idea. For fractions as division, $8 \div 5 = \frac{8}{5} = 1\frac{3}{5}$. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

10. Keep the work tidy. For fractions as division, the fraction $\frac{15}{4}$ means 15 divided by 4. Fractions are easier to combine when the pieces are the same size.

11. Look at what the numbers mean. For fractions as division, four pizzas shared by six friends gives $\frac{4}{6} = \frac{2}{3}$ each. Always simplify at the end so the answer is clean and useful.

12. Use the setup first. For fractions as division, $10 \div 3 = \frac{10}{3} = 3\frac{1}{3}$. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

13. Check the size of the answer. For fractions as division, five bars shared by eight students gives $\frac{5}{8}$ bar each. Fractions are easier to combine when the pieces are the same size.

14. Match the operation to the words. For fractions as division, each piece is $7 \div 12 = \frac{7}{12}$ foot, about 0.58 foot. Always simplify at the end so the answer is clean and useful.



Want Even More Practice?

Check Out Our Other Iowa ISASP Test Books!



Iowa ISASP Grade 5 Math Preparation Bundle

18 full-length practice tests across three books
(5 + 6 + 7)

No repeated questions—maximum practice value!



18 Tests!
3 Books
One Bundle

Important: All our test books contain **unique, completely different tests** from each other! Each book offers fresh practice questions—no repeats!

5 Practice Tests

- ✓ 5 complete practice tests with detailed explanations
- ✓ Perfect foundation for ISASP test preparation
- ✓ Builds confidence and test-taking skills
- ✓ High-quality questions aligned with state standards

Start your practice journey!

6 Practice Tests

- ✓ 6 complete practice tests with detailed explanations
- ✓ **Unique tests**—different from the 5 tests book
- ✓ Perfect for more practice after mastering 5 tests
- ✓ Builds even more confidence and test-taking skills
- ✓ Same high-quality questions aligned with standards

Take your practice to the next level!

7 Practice Tests

- ✓ 7 complete practice tests for maximum preparation
- ✓ **Unique tests**—different from 5 and 6 tests books
- ✓ The most comprehensive practice for Grade 5
- ✓ Ideal for students aiming for top scores
- ✓ Extensive practice builds mastery and confidence

Go all the way with comprehensive practice!