

Grade 6 - Dividing Fractions by Fractions - Test Answer Key

Common Core 6.NS.A.1 · maths-pdf.fr/en/

This **divide fractions test answers** for 6th Grade covers dividing fractions by fractions (Common Core 6.NS.A.1), with a free PDF to print.

Use this key to score the dividing fractions test out of 20 points. Every solution is fully worked, and the scoring line explains how to award each point and partial credit.

Grade 6 · Common Core State Standards: **6.NS.A.1**

Divide fractions test answers: worked solutions

Question 1 - Divide with a model [2 pts]

$$\frac{5}{6} \div \frac{1}{12} = \frac{5}{6} \times 12 = 10$$

Ten twelfths fill five sixths.

Scoring: 1 point for the method (model or reciprocal); 1 point for 10.

Question 2 - Whole number by a fraction [2 pts]

$$4 \div \frac{2}{3} = 4 \times \frac{3}{2} = 6$$

6



Six jumps of two thirds reach 4.

Scoring: 1 point for multiplying by the reciprocal; 1 point for 6.

Question 3 - Fraction by fraction [2 pts]

$$\frac{5}{8} \div \frac{3}{4} = \frac{5}{8} \times \frac{4}{3} = \frac{5}{6}$$

$$\frac{5}{6}$$

Scoring: 1 point for the reciprocal step; 1 point for 5/6.

Question 4 - Fraction by whole [2 pts]

$$\frac{3}{5} \div 6 = \frac{3}{5} \times \frac{1}{6} = \frac{1}{10}$$

$$\frac{1}{10}$$

Scoring: 1 point for the setup; 1 point for 1/10.

Question 5 - Mixed numbers [2 pts]

$$1\frac{3}{4} \div \frac{1}{2} = \frac{7}{4} \div \frac{1}{2} = \frac{7}{4} \times 2 = \frac{7}{2} = 3\frac{1}{2}$$

$$\frac{7}{2} = 3\frac{1}{2}$$

Scoring: 1 point for converting to improper fractions; 1 point for 7/2 or 3 1/2.

Question 6 - Servings [2 pts]

$$\frac{5}{2} \div \frac{1}{2} = \frac{5}{2} \times 2 = 5$$

She can make 5 loaves.

Scoring: 1 point for the division; 1 point for 5 loaves.

Question 7 - Missing length [2 pts]

$$\frac{5}{6} \div \frac{5}{3} = \frac{5}{6} \times \frac{3}{5} = \frac{1}{2}$$

The width is 1/2 meter.

Scoring: 1 point for dividing area by length; 1 point for 1/2 m.

Question 8 - Pizza sharing [3 pts]

$$\text{Friends: } \frac{3}{4} \div \frac{1}{8} = \frac{3}{4} \times 8 = 6.$$

Equal shares: $\frac{3}{4} \div 3 = \frac{3}{4} \times \frac{1}{3} = \frac{1}{4}$.

6 friends; each of 3 friends gets $\frac{1}{4}$.

Scoring: 1 point for each quotient with a correct method; 1 point for a clear final statement.

Question 9 - Walking speed [3 pts]

Speed: $\frac{3}{4} \div \frac{1}{4} = 3$ miles per hour.

Time: $\frac{9}{2} \div 3 = \frac{9}{2} \times \frac{1}{3} = \frac{3}{2} = 1\frac{1}{2}$ hours.

Miles	3	1 1/2
Hours	1	1/2

Three miles in the first hour and the rest in half an hour.

Scoring: 1 point for the speed; 1 point for the time setup; 1 point for 1 1/2 hours.

Total score

Total

20 points

Key facts behind this divide fractions test answers

Key facts

- Dividing by a fraction means multiplying by its reciprocal.
- Reciprocals multiply to 1: $\frac{2}{3}$ and $\frac{3}{2}$.
- Write mixed numbers as improper fractions before dividing.
- Dividing by a fraction less than 1 gives a quotient greater than the dividend.
- Check a quotient by multiplying it by the divisor.

How to use this divide fractions test answers

Score your test with the point values shown for each question. Then read the worked solution of every question where you lost points and note the method to review.