

# Grade 6 - Dividing Fractions by Fractions - Test

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

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

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

This 45-minute test has 9 questions worth 20 points. It covers dividing fractions and mixed numbers, using models, and solving word problems (Common Core 6.NS.A.1). Show your work for full credit.

## Time and points

### About this test

- Grade: Grade 6
- Chapter: Dividing Fractions by Fractions
- Standards: 6.NS.A.1
- Time: 45 minutes
- Total: 20 points

## Divide fractions test: questions

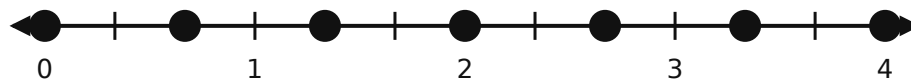
### Question 1 - Divide with a model [2 pts]



Strips for five sixths and twelfths.

Find  $\frac{5}{6} \div \frac{1}{12}$ .

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



Jumps of two thirds along a number line.

Find  $4 \div \frac{2}{3}$ .

### Question 3 - Fraction by fraction [2 pts]

Find  $\frac{5}{8} \div \frac{3}{4}$ .

### Question 4 - Fraction by whole [2 pts]

Find  $\frac{3}{5} \div 6$ .

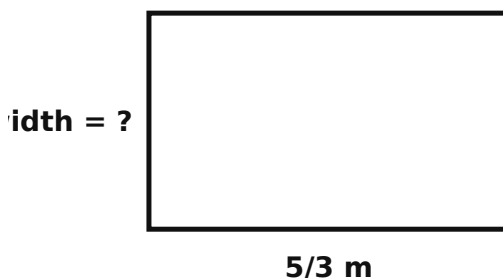
### Question 5 - Mixed numbers [2 pts]

Find  $1\frac{3}{4} \div \frac{1}{2}$ .

### Question 6 - Servings [2 pts]

A bag has  $2\frac{1}{2}$  pounds of flour. A recipe uses  $\frac{1}{2}$  pound per loaf. Find the number of loaves.

### Question 7 - Missing length [2 pts]



Area is  $\frac{5}{6}$  square meter.

A rectangle has an area of  $\frac{5}{6} \text{ m}^2$  and a length of  $\frac{5}{3} \text{ m}$ . Find the width.

### Question 8 - Pizza sharing [3 pts]

Aisha has  $\frac{3}{4}$  of a pizza. She gives each friend  $\frac{1}{8}$  of a whole pizza. Find how many friends get a share, and what fraction of the whole pizza each friend would get if she shared her  $\frac{3}{4}$  equally among 3 friends instead.

### Question 9 - Walking speed [3 pts]

Diego walks  $\frac{3}{4}$  mile in  $\frac{1}{4}$  hour. Find his speed in miles per hour. At that speed, how long does it take to walk  $4\frac{1}{2}$  miles?

#### Key facts behind this divide fractions test

##### 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

Time yourself: the test is designed for an average student in 45 minutes. Answer the questions you are sure of first, then come back to the longer ones and check your units.