

# Grade 6 - Dividing Fractions by Fractions - Quiz

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

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

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

This quiz has 10 multiple-choice questions on dividing fractions and mixed numbers (Common Core 6.NS.A.1). Choose one answer for each question and read the explanation to see each common mistake.

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

## Divide fractions quiz: 10 questions

### Questions

#### Question 1

What is  $\frac{2}{3} \div \frac{1}{6}$ ?

$\frac{2}{3}$



$\frac{1}{6}$



Fraction strips.

- A.  $\frac{1}{9}$
- B.  $\frac{5}{6}$
- C. 4
- D.  $\frac{1}{4}$

#### Question 2

What is the reciprocal of  $\frac{4}{9}$ ?

- A.  $\frac{4}{9}$
- B.  $\frac{9}{4}$
- C.  $-\frac{4}{9}$
- D.  $\frac{5}{9}$

#### Question 3

What is  $6 \div \frac{2}{3}$ ?

- A.  $\frac{9}{4}$
- B.  $\frac{4}{9}$
- C.  $\frac{1}{9}$
- D.  $\frac{2}{18}$

#### Question 4

A pizza shop uses  $\frac{3}{8}$  pound of cheese on each pizza. How many pizzas can it make from 3 pounds of cheese?

- A.  $\frac{9}{8}$
- B. 8
- C.  $\frac{1}{8}$
- D. 24

#### Question 5

What is  $\frac{5}{6} \div \frac{1}{3}$ ?

- A.  $2\frac{1}{2}$
- B.  $\frac{5}{18}$
- C.  $\frac{2}{5}$
- D. 2

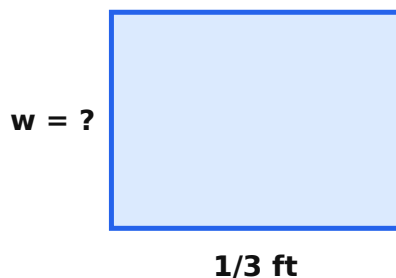
#### Question 6

How many  $\frac{3}{4}$ -cup servings are in  $4\frac{1}{2}$  cups of yogurt?

- A. 6
- B. 3
- C. 12
- D.  $3\frac{3}{8}$

#### Question 7

A rectangle has area  $\frac{2}{3}\text{ ft}^2$  and length  $\frac{1}{3}\text{ ft}$ . What is the width?



Rectangle.

- A.  $\frac{2}{9}\text{ ft}$
- B.  $\frac{1}{2}\text{ ft}$

- C.  $2 \text{ ft}$   
 D.  $1 \text{ ft}$

### Question 8

Which equals  $\frac{7}{8} \div \frac{7}{16}$ ?

- A.  $\frac{1}{2}$   
 B.  $\frac{49}{128}$   
 C.  $1$   
 D.  $2$

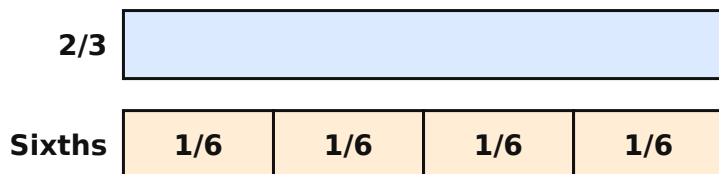
### Question 9

What is  $2 \frac{1}{4} \div \frac{3}{4}$ ?

- A.  $1 \frac{11}{16}$   
 B.  $3$   
 C.  $\frac{1}{3}$   
 D.  $2$

### Question 10

A tape diagram shows 2 thirds split into pieces of  $\frac{1}{6}$ . How many pieces are there?



Four pieces.

- A. 2  
 B. 3  
 C. 12  
 D. 4

## Answers

1. **C** - Four sixths fit in two thirds. Multiplying  $2 \div (3 \times 1) \div (6 = 1) \div 9$  is the most common mistake.
2. **B** - The reciprocal swaps the numerator and denominator.
3. **A** -  $(6 \times 3) \div (2 = 9)$ . Using  $2/3$  instead of  $3/2$  gives 4.
4. **B** -  $3 \div (3/8) = (3 \times 8) \div (3 = 8)$ . The product  $(3 \times 3) \div (8 = 9) \div 8$  is not the number of pizzas.
5. **A** -  $5 \div (6 \times 3 = 15) \div (6 = 5) \div (2 = 2) \div 1/2$ .
6. **A** -  $9 \div (2 \times 4) \div (3 = 36) \div (6 = 6)$ .  $3 \times 3/8$  is the product, not the quotient.
7. **C** - Width =  $(2/3) \div (1/3) = 2$ . The product  $2/9$  is the wrong operation.
8. **D** -  $7 \div (8 \times 16) \div (7 = 2)$ . The numerators match, so compare 8ths: 14 sixteenths divided by 7 sixteenths is 2.
9. **B** -  $9 \div (4 \times 4) \div (3 = 3)$ .
10. **D** -  $2 \div (3 \div 1) \div (6 = 2) \div (3 \times 6 = 4)$ .

## Remember

### Remember

- Dividing by a fraction means multiplying by its reciprocal.
- Reciprocals multiply to 1:  $2/3$  and  $3/2$ .
- 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 quiz

Answer each question, read the explanation that appears, and keep track of your score. A score of 8 out of 10 or more means you are ready for the test.

Download the divide fractions quiz as a PDF with the button below and keep it with your notes.