

Grade 6 - Dividing Fractions by Fractions - Worksheet

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

Name: _____ Class: _____ Date: ____/____/____

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

These 20 problems practice dividing fractions by fractions (Common Core 6.NS.A.1). You will use fraction strips and number lines, multiply by reciprocals, divide mixed numbers, and solve word problems about recipes, ribbon, speed, and area.

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

Divide fractions worksheet: exercises 1 to 10

Exercise 1 - Thirds and sixths



Two sixths fill the same space as one third.

Use the strips to find $\frac{1}{3} \div \frac{1}{6}$.

Exercise 2 - Rope pieces



A rope 5 feet long.

A camp counselor cuts a rope that is 5 feet long into pieces that are $\frac{1}{4}$ foot long. Find the number of pieces.

Exercise 3 - Sixths in two thirds

Find $\frac{2}{3} \div \frac{1}{6}$.

Exercise 4 - Common numerators

Find $\frac{5}{8} \div \frac{5}{16}$.

Exercise 5 - Divide fractions

Find $\frac{7}{9} \div \frac{2}{3}$.

Exercise 6 - Fraction divided by a whole number



Three equal groups of two sevenths.

Find $\frac{6}{7} \div 3$.

Exercise 7 - Divide into four groups

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

Exercise 8 - Fifths over thirds

Find $\frac{5}{6} \div \frac{1}{3}$.

Exercise 9 - Mixed number quotient

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

Exercise 10 - Mixed number by a fraction

Find $2\frac{1}{4} \div \frac{3}{8}$.

Exercises 11 and up

Exercise 11 - Mixed by mixed

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

Exercise 12 - Reciprocals

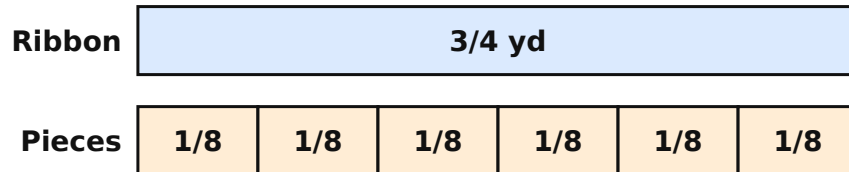
Write the reciprocal of each number.

- a. $\frac{3}{7}$
- b. 5
- c. $1\frac{1}{2}$

Exercise 13 - Missing factor

Solve for the missing number: $\frac{3}{5} \times ? = \frac{2}{3}$.

Exercise 14 - Ribbon pieces



Each piece is one eighth of a yard.

Sofia has $\frac{3}{4}$ yard of ribbon. She cuts pieces that are $\frac{1}{8}$ yard long. Find the number of pieces.

Exercise 15 - Trail mix bags

Jamal splits $\frac{2}{3}$ pound of trail mix equally into 4 bags. Find the weight of each bag.

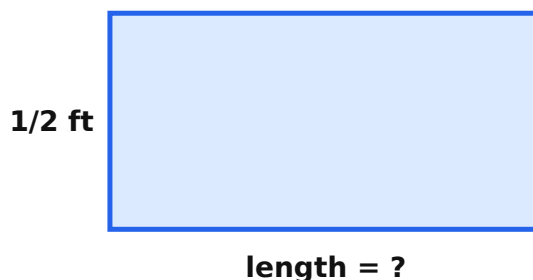
Exercise 16 - Syrup servings



Each serving is three eighths of a cup.

A pancake stand has $5\frac{1}{4}$ cups of syrup. Each serving is $\frac{3}{8}$ cup. Find the number of servings.

Exercise 17 - Missing side



The area is $\frac{3}{4}$ square foot.

A rectangle has an area of $\frac{3}{4} \text{ ft}^2$ and a width of $\frac{1}{2} \text{ ft}$. Find the length.

Exercise 18 - Painting rate

Priya paints $\frac{5}{6}$ of a wall in $\frac{2}{3}$ hour. Find the fraction of a wall she paints in one hour.

Exercise 19 - Find the mistake

Noah says $\frac{1}{2} \div \frac{1}{4}$ equals $\frac{1}{8}$. Explain his mistake and give the correct quotient.

Exercise 20 - Cookie batches

A batch of cookies needs $\frac{2}{3}$ cup of sugar. Mei has $3\frac{1}{2}$ cups of sugar. Find the number of full batches she can make and how much sugar is left.

Key facts behind this divide fractions worksheet

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 worksheet

Work through the exercises in order: they go from simple to challenging. Write every step on paper, then compare with the solutions page and redo any exercise you missed the next day.