

Dividing Fractions Worksheet

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Part 1: Building a Foundation

What is the first step in dividing fractions?

Hint: Think about the operations involved in division.

- A) Add the fractions
- C) Keep the first fraction as it is
- D) Subtract the fractions
- C) Multiply the fractions

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Hint: Think about the operations involved in fraction division.

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Which of the following are true about reciprocals?

Hint: Consider the properties of fractions and their reciprocals.

- A) The reciprocal of a fraction is obtained by swapping its numerator and denominator.

- C) Reciprocals are only used in addition.
- D) Reciprocals are used in division of fractions.
- C) The product of a fraction and its reciprocal is always 1.

Which of the following are true about reciprocals?

Hint: Consider the properties of fractions and their inverses.

- The reciprocal of a fraction is obtained by swapping its numerator and denominator.
- The product of a fraction and its reciprocal is always 1.
- Reciprocals are only used in addition.
- Reciprocals are used in division of fractions.

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- A) The reciprocal of a fraction is obtained by swapping its numerator and denominator.
- B) The product of a fraction and its reciprocal is always 1.
- C) Reciprocals are only used in addition.
- D) Reciprocals are used in division of fractions.

Explain why it is necessary to find the reciprocal of the second fraction when dividing fractions.

Hint: Think about the role of reciprocals in division.

Explain why it is necessary to find the reciprocal of the second fraction when dividing fractions.

Hint: Think about how division is related to multiplication.

Explain why it is necessary to find the reciprocal of the second fraction when dividing fractions.

Hint: Think about the role of reciprocals in division.

Part 2: Comprehension and Application

What is the reciprocal of the fraction $\frac{3}{4}$?

Hint: Remember how to find the reciprocal.

- $\frac{4}{3}$
- $\frac{3}{4}$
- $\frac{1}{3}$
- $\frac{1}{4}$

What is the reciprocal of the fraction $\frac{3}{4}$?

Hint: Think about how to swap the numerator and denominator.

- A) $\frac{4}{3}$
- C) $\frac{1}{3}$
- D) $\frac{1}{4}$
- C) $\frac{3}{4}$

What is the reciprocal of the fraction $\frac{3}{4}$?

Hint: Think about how to swap the numerator and denominator.

- A) $\frac{4}{3}$
- B) $\frac{3}{4}$
- C) $\frac{1}{3}$
- D) $\frac{1}{4}$

Which of the following statements are correct about simplifying fractions?

Hint: Consider the process of reducing fractions to their simplest form.

- A) A fraction is simplified when the numerator and denominator are as small as possible.
- B) Simplifying involves multiplying the numerator and denominator by the same number.
- C) Simplifying involves dividing the numerator and denominator by their greatest common factor.
- D) Simplification is not necessary for improper fractions.

Which of the following statements are correct about simplifying fractions?

Hint: Consider the methods used to simplify fractions.

- A) A fraction is simplified when the numerator and denominator are as small as possible.
- B) Simplifying involves multiplying the numerator and denominator by the same number.
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- D) Simplification is not necessary for improper fractions.
- C) Simplifying involves multiplying the numerator and denominator by the same number.

A car travels $\frac{3}{4}$ of a mile in $\frac{1}{2}$ an hour. How many miles per hour is the car traveling? Show your work.

Hint: Think about how to convert the distance and time into a rate.

A car travels $\frac{3}{4}$ of a mile in $\frac{1}{2}$ an hour. How many miles per hour is the car traveling? Show your work.

Hint: Think about the formula for speed.

A car travels $\frac{3}{4}$ of a mile in $\frac{1}{2}$ an hour. How many miles per hour is the car traveling? Show your work.

Hint: Think about how to convert distance and time into a rate.

If you have $\frac{1}{2}$ of a pizza and you want to divide it equally among 3 friends, what fraction of the pizza does each friend get?

Hint: Consider how to divide a fraction by a whole number.

- A) $\frac{1}{6}$
- C) $\frac{1}{4}$
- D) $\frac{1}{5}$
- C) $\frac{1}{3}$

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- C) $\frac{1}{4}$
- D) $\frac{1}{5}$

Part 3: Analysis, Evaluation, and Creation

Which of the following expressions correctly represents dividing $\frac{5}{6}$ by $\frac{2}{3}$?

Hint: Think about how to express division in terms of multiplication.

- $(\frac{5}{6}) \times (\frac{3}{2})$
- $(\frac{5}{6}) \times (\frac{2}{3})$
- $(\frac{6}{5}) \times (\frac{3}{2})$
- $(\frac{6}{5}) \times (\frac{2}{3})$

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- C) $(\frac{6}{5}) \times (\frac{3}{2})$
- D) $(\frac{6}{5}) \times (\frac{2}{3})$
- C) $(\frac{5}{6}) \times (\frac{2}{3})$

Which of the following expressions correctly represents dividing $\frac{5}{6}$ by $\frac{2}{3}$?

Hint: Consider how to express division of fractions in multiplication form.

- A) $(5/6) \times (3/2)$
- B) $(5/6) \times (2/3)$
- C) $(6/5) \times (3/2)$
- D) $(6/5) \times (2/3)$

Identify the correct steps in simplifying the result of dividing $4/9$ by $2/3$.

Hint: Think about the process of simplification after division.

- Find the reciprocal of $2/3$.
- Multiply $4/9$ by $3/2$.
- Simplify the resulting fraction by dividing by the GCF.
- Add the numerators and denominators.

Identify the correct steps in simplifying the result of dividing $4/9$ by $2/3$.

Hint: Think about the order of operations in fraction division.

- A) Find the reciprocal of $2/3$.
- C) Simplify the resulting fraction by dividing by the GCF.
- D) Add the numerators and denominators.
- C) Multiply $4/9$ by $3/2$.

Identify the correct steps in simplifying the result of dividing $4/9$ by $2/3$.

Hint: Think about the order of operations and simplification.

- A) Find the reciprocal of $2/3$.
- B) Multiply $4/9$ by $3/2$.
- C) Simplify the resulting fraction by dividing by the GCF.
- D) Add the numerators and denominators.

Analyze the following division of fractions: $(7/8) \div (1/4)$. Explain each step and simplify the result.

Hint: Break down the division into multiplication and simplification.

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Hint: Break down the division process into clear steps.

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Hint: Break down the process into clear steps.

Which of the following scenarios correctly illustrates dividing fractions?

Hint: Think about real-life applications of dividing fractions.

- Splitting a $3/4$ cup of flour into $1/2$ cup portions.
- Combining $1/3$ cup of sugar with $1/4$ cup of sugar.
- Multiplying $2/5$ of a recipe by 3.
- Subtract $1/6$ of a pizza from $1/2$ of a pizza.

Which of the following scenarios correctly illustrates dividing fractions?

Hint: Consider real-world applications of dividing fractions.

- A) Splitting a $\frac{3}{4}$ cup of flour into $\frac{1}{2}$ cup portions.
- C) Multiplying $\frac{2}{5}$ of a recipe by 3.
- D) Subtract $\frac{1}{6}$ of a pizza from $\frac{1}{2}$ of a pizza.
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- A) Splitting a $\frac{3}{4}$ cup of flour into $\frac{1}{2}$ cup portions.
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- C) Multiplying $\frac{2}{5}$ of a recipe by 3.
- D) Subtract $\frac{1}{6}$ of a pizza from $\frac{1}{2}$ of a pizza.

Design a word problem involving the division of fractions in a cooking scenario. Provide a detailed solution and explanation.

Hint: Think about how fractions are used in recipes.

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Design a word problem involving the division of fractions in a cooking scenario. Provide a detailed solution and explanation.

Hint: Think creatively about a cooking situation that involves fractions.