Part 1

[Upbeat and engaging tone]

🎙️ **Introduction**

"Let's dive into the fascinating **Avidator's Guide to Fractions.**
A fraction is simply a part of a whole or a part of a group.
It helps us break down things into equal portions. Sounds simple. Let's explore further!"

🎙️ **What is a Fraction?**

"So, what exactly is a fraction? It's made up of two parts:

- The **numerator**, the number on top, tells us how many parts we're talking about.
- The **denominator**, the number on the bottom, tells us the total number of equal parts that make up the whole.

For example, in the fraction **three-fourths**, the numerator is three, and the denominator is four.
This means we're looking at three parts out of four equal parts.
Simple, right?"

🎙️ **Fractions in Everyday Life**

"Now, here's where it gets interesting—fractions are everywhere around us!
Imagine baking. You might measure **two-thirds of a cup of flour** for a recipe.
Or think about building something—you might need **three-fourths of an inch** for the perfect fit.

And let's not forget sharing!
Splitting a pizza into eight equal slices and eating three of them? That's **three-eighths of the pizza**.
See? Fractions aren't just math—they're part of everyday life!"

🎙️ **Understanding the Shaded Part**

"Let's make this more visual.
Imagine a shape divided into eight parts, three of which are shaded.

How many parts are shaded? **Three.**
How many total parts are there? **Eight.**

That's it! The fraction representing the shaded part is **three-eighths**.
Easy and fun, isn't it?"

Part 2

[Upbeat and clear tone]

🎙️ Simplifying Fractions

"Hello, and welcome to Avidator! Today, we're exploring how to simplify fractions."

Sometimes, fractions can look big and tricky, but we can make them simpler.

Simplifying means finding the smallest version of a fraction while keeping its value the same. A fraction is fully simplified when the top number (**numerator**) and the bottom number (**denominator**) have no common factors other than **1**."

There are two common methods for simplifying fractions:

1. **Method 1: Step-by-Step Simplification Using the Greatest Common Divisor (GCD)**
2. **Method 2: Step-by-Step Simplification Using Common Factors**

Let's delve into each method step by step.

Method 1: Simplification Using the Greatest Common Divisor (GCD)

This method reduces a fraction by dividing the numerator and the denominator by their greatest common divisor.

Steps:

1. **Find the GCD** of the numerator and denominator.
2. **Divide both** the numerator and denominator by the GCD.
3. **Express** the fraction in its simplest form.

Let's look at this example:

🎙️ Example 1: Simplify Eight-Twelfths

"Let's simplify the fraction 8/12 step by step!"

1. First, find the Greatest Common Divisor, or GCD, of 8 and 12 step by step!"

   Step 1 – List the Factors
   "First, we list the factors of each number.

   - The factors of 8 are: **1, 2, 4, and 8**.
   - The factors of 12 are: **1, 2, 3, 4, 6, and 12**."

   Step 2 – Identify Common Factors
   "Next, we find the common factors. Both numbers share **1, 2, and 4**."

   Step 3 – Find the Greatest Common Factor
   The largest common factor is **4**. That means the GCD of 8 and 12 is **4**!"

2. Now divide both the numerator and the denominator by four:
   - Eight divided by four equals **two**.
   - Twelve divided by four equals **three**.

So, eight-twelfths simplifies to **two-thirds**. Not too hard, right?"

🎙️ **Example 2: Simplify Twenty-Four Thirty-Sixths**
"Let's try a bigger fraction: **twenty-four thirty-sixths**.

"Start simplifying the fraction **twenty-four thirty-sixths** step by step!"

Step 1 – Find the GCD
"First, we must find the **Greatest Common Divisor**, or GCD, of 24 and 36.

- The factors of 24 are: **1, 2, 3, 4, 6, 8, 12, and 24**.
- The factors of 36 are: **1, 2, 3, 4, 6, 9, 12, 18, and 36**."

Step 2 – Identify the Greatest Common Factor
The common factors are **1, 2, 3, 4, 6, and 12**. The greatest one is **12**!"

Step 3 – Divide by the GCD, which is 12
"Now, we divide both the numerator and denominator by **12**.

- Twenty-four divided by twelve equals **two**.
- Thirty-six divided by twelve equals **three**.

"So, twenty-four thirty-sixths simplifies to **two-thirds**. Keep practicing, and you'll simplify fractions like a pro in no time!"

So, **24/36 simplifies to 2/3!** ✅

Awesome! That's the **fastest way** using the GCD!"

Method 2: Simplification Using Common Factors

This approach involves dividing the numerator and denominator by common factors until no further simplification is possible.

Steps:

1. **Identify a common factor** of the numerator and denominator.
2. **Divide both** the numerator and denominator by this common factor.
3. **Repeat** the process until no common factors remain.
4. **Express** the fraction in its simplest form.

Example:

Let's learn how to simplify fractions step by step. Now, we're going to simplify **twenty-four thirty-sixths by this method!** Ready? Let's go!"

Step 1: Look for a common number

"First, we check if both numbers can be divided by the same number. Since **24 and 36** are both even, let's divide them by **2**!"

- Twenty-four divided by two equals **twelve**.
- "24 ÷ 2 = **12**"

- Thirty-six divided by two equals **eighteen.**
- "36 ÷ 2 = **18**"

"Now our new fraction is **12 over 18**!"

Now, our fraction is **12/18**."

Step 2: Divide by 2 again!

"Are both numbers still even? Yes! Let's divide by **2** again:

- Twelve divided by two equals **six**.

  "12 ÷ 2 = **6**"

- Eighteen divided by two equals **nine**.

  "18 ÷ 2 = **9**"

"Now, we have **six over 9**!"

Now, we have **6/9**."

Step 3: Divide by 3

"Now, let's check—can we divide **6 and 9** by a common number? Yes! They both divide by **3**!"

- Six divided by three equals **two**.
- "6 ÷ 3 = **2**"

- Nine divided by three equals **three**.
- "9 ÷ 3 = **3**"

"Now, we have **two over 3**!"

Now, we have **2/3!** ✅"

Step 4: Check if we're done!

"Hmm… can we divide **2 and 3** by the same number again? Nope! That means **two-thirds** is the simplest form of twenty-four thirty-sixths!"

So, **2/3 is our final answer!** 🎉

That's it! **You did it!**"

🎙️ Summary & Key Takeaways

"Great job! 🎉 Let's review what we learned today:

✅ **Fractions can be simplified to their smallest form.**
✅ **Two ways to simplify:**

- **Method 1:** Find the **Greatest Common Divisor (GCD)** and divide.
- **Method 2:** Divide step by step using **common factors**.

Both methods **work great**—you can use whichever you like best!"

🎙️ Closing Thoughts

Fractions are everywhere! We use them to share food, measure things, and solve problems.

Now that you know how to simplify fractions, you're one step closer to becoming a math pro! 🏆

So, keep practicing, have fun, and remember—math is easier when you break it down!

Thanks for learning with me today! See you next time! 😊🎉"

(Upbeat background music fades out.)

Part 3

Welcome
"Welcome back to Avidator's *World of Fractions*! In this session, we'll learn about the different types of fractions, their characteristics, and examples for each. Let's get started."

Types of Fractions
"Several types of fractions help us describe parts of a whole. These include:

- Proper fractions
- Improper fractions
- Mixed fractions
- Like fractions
- Unlike fractions
- Unit fractions
- And equivalent fractions."

Proper Fractions
"A proper fraction has a numerator smaller than the denominator. This means its value is always

less than one.
For example, **three-fourths (3/4)** or **five-eighths (5/8).**"

Improper Fractions
"An improper fraction has a numerator greater than or equal to the denominator. Its value is equal to or greater than one.
Examples include **seven-fourths (7/4)** or **nine-fifths (9/5).**"

Mixed Fractions
"A mixed fraction combines a whole number with a proper fraction. It represents values greater than one.
For instance, **four and three-fifths (4 3/5)** or **seven and two-ninths (7 2/9).**"

Like Fractions
Fractions that have the same denominator are called like fractions.
For example, **two-fifths (2/5)** and **three-fifths (3/5)** are like fractions because both have the same denominator: 5."

Unlike Fractions
Unlike fractions, on the other hand, have different denominators.
For example, **two-thirds (2/3)** and **five-fourths (5/4)** are unlike fractions because their denominators, 3 and 4, are different."

Unit Fractions
"A unit fraction always has one as the numerator. It represents one part of a whole divided into equal parts.
Examples include **one-third (1/3), one-half (1/2),** or **one-fourth (1/4).**"

Equivalent Fractions
"Equivalent fractions represent the same value even though their numerators and denominators differ.
You can create equivalent fractions by multiplying or dividing the numerator and denominator by the same number.

For example, **one-half (1/2)** equals **two-fourths (2/4).**

Let's see another example:
Two-thirds (2/3), four-sixths (4/6), and **six-ninths (6/9)** are all equivalent fractions.
Here's why:

- Simplify **six-ninths** by dividing both the numerator and the denominator by 3:
  6 divided by 3 is 2, and 9 divided by 3 is 3. So, 6/9 equals 2/3.
- You can also multiply **two-thirds** by 2:
  Two times 2 is 4, and 3 times 2 is 6, giving us 4/6.

This shows that **6/9, 2/3,** and **4/6** all represent the same value."

Closing
Understanding the different types of fractions helps us work with them more easily, whether comparing, adding, or simplifying them. Thank you for being part of Avidator's *World of Fractions*! Stay tuned for more lessons."

Part 4

Welcome
"Welcome to Avidator's *World of Fractions*! Today's lesson'll focus on converting mixed fractions into improper fractions and improper fractions back into mixed fractions. Let's break it down step by step."

Converting Mixed Fractions to Improper Fractions
"A mixed fraction combines a whole number with a fraction. To convert it into an improper fraction, follow these three steps:

Example 1: Convert 3 2/5 to an Improper Fraction

1. Multiply the whole number by the denominator:
   Three times 5 equals 15.
2. Add the numerator to the result:
   15 plus 2 equals 17.
3. Write the result as an improper fraction:
   The improper fraction is 17/5.

Example 2: Convert 4 3/7 to an Improper Fraction

1. Multiply the whole number by the denominator:
   Four times 7 equals 28.
2. Add the numerator to the result:
   28 plus 3 equals 31.
3. Write the result as an improper fraction:
   The improper fraction is 31/7."

Converting Improper Fractions to Mixed Fractions
"An improper fraction has a numerator greater than or equal to the denominator. To convert it into a mixed fraction, follow these steps:

Example 1: Convert 17/5 to a Mixed Fraction

1. Divide the numerator by the denominator:
   17 divided by 5 equals 3, with a remainder of 2.
   Here, the quotient is **3**, and the remainder is **2.**
2. Write the result as a mixed fraction:
   The mixed fraction is 3 2/5.

Example 2: Convert 22/7 to a Mixed Fraction

1. Divide the numerator by the denominator:
   22 divided by 7 equals 3, with a remainder of 1.
   Here, the quotient is **3**, and the remainder is **1.**
2. Write the result as a mixed fraction:
   The mixed fraction is 3 1/7."

Closing
Understanding how to switch between mixed and improper fractions helps us work with fractions in different situations. Thank you for being part of Avidator's *World of Fractions*. Keep practicing, and see you in the next lesson!"

Part 5

"When comparing fractions, we find the Least Common Denominator (LCD) to make the same denominators.

Example: Compare 3/4 and 5/6

1. The LCD of 4 and 6 is 12.
2. Convert the fractions:
   3/4 becomes 9/12 and **5/6 becomes 10/12.**
3. Compare the numerators:
   10/12 is greater than 9/12.

Therefore, **5/6 is greater than 3/4."**

Ordering Fractions

"To order fractions from least to greatest, we again find the LCD and convert the fractions.

Example: Order 1/3, 4/5, and 2/7 from Least to Greatest

1. The LCD of 3, 5, and 7 is 105.
2. Convert the fractions:
    - **1/3 becomes 35/105,**
    - **4/5 becomes 84/105,**
    - **2/7 becomes 30/105.**
3. Compare the numerators:
   30 < 35 < 84.

So, the order is: **2/7 < 1/3 < 4/5.**"

Mathematical Operations on Fractions

"Now, let's explore how to add, subtract, multiply, and divide fractions."

Addition

"To add fractions, find a common denominator, then add the numerators.

Example: 3/4 + 2/7

1. The LCD of 4 and 7 is 28.
2. Convert the fractions:
   3/4 becomes 21/28 and **2/7 becomes 8/28.**
3. Add the numerators:
   21/28 + 8/28 equals 29/28."

Subtraction

"Subtract fractions similarly: find a common denominator and subtract the numerators.

Example: 3/4 - 2/7

1. The LCD is 28.
2. Convert the fractions:
   3/4 becomes 21/28 and **2/7 becomes 8/28.**
3. Subtract the numerators:
   21/28 - 8/28 equals 13/28."

Multiplication

"To multiply fractions, multiply the numerators together and the denominators together.

Example: 3/4 × 2/7

1. Multiply the numerators: **3 times 2 equals 6.**
2. Multiply the denominators: **4 times 7 equals 28.**
3. The product is: **6/28,** which simplifies to **3/14.**"

Division

"To divide fractions, multiply the first fraction by the reciprocal of the second fraction.

Example: 3/4 ÷ 2/7

1. Flip the second fraction: **2/7 becomes 7/2.**
2. Multiply: **3/4 × 7/2.**
3. Multiply the numerators: **3 times 7 equals 21.**
4. Multiply the denominators: **4 times 2 equals 8.**
5. The result is: **21/8.**"

Closing
"That's all for today's session! With these methods, you can confidently compare, order, and perform operations on fractions. Thank you for learning with Avidator's *World of Fractions*. Keep practicing, and see you next time!"

Part 6

Welcome
"Welcome back to Avidator's *World of Fractions*! In this session, we'll explore the order of operations with fractions, known as PEMDAS or BODMAS, and learn how to convert fractions into decimals and percentages. Let's get started!"

Order of Operations with Fractions (PEMDAS/BODMAS)

"Remember the order of operations:

- **P/B**: Parentheses or Brackets.
- **E/O**: Exponents or Orders.

- **MD**: Multiplication and Division (from left to right).
- **AS**: Addition and Subtraction (from left to right).

Let’s solve examples to understand this better."

Example 1: 34+(12×34)\frac{3}{4} + \left(\frac{1}{2} \times \frac{3}{4}\right)43+(21×43)

1. **Parentheses**: Simplify 12×34=38\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}21×43=83.
2. **Addition**: Add 34+38\frac{3}{4} + \frac{3}{8}43+83:
    - Find the LCD of 4 and 8: LCD = 8.
    - Convert fractions: 34=68\frac{3}{4} = \frac{6}{8}43=86 and 38=38\frac{3}{8} = \frac{3}{8}83=83.
    - Add: 68+38=98\frac{6}{8} + \frac{3}{8} = \frac{9}{8}86+83=89.

Result: 98\frac{9}{8}89.

Example 2: 23÷(56−14)\frac{2}{3} \div \left(\frac{5}{6} - \frac{1}{4}\right)32÷(65−41)

1. **Parentheses**: Simplify 56−14\frac{5}{6} - \frac{1}{4}65−41:
    - Find the LCD of 6 and 4: LCD = 12.
    - Convert: 56=1012\frac{5}{6} = \frac{10}{12}65=1210 and 14=312\frac{1}{4} = \frac{3}{12}41=123.
    - Subtract: 1012−312=712\frac{10}{12} - \frac{3}{12} = \frac{7}{12}1210−123=127.
2. **Division**: Divide 23÷712\frac{2}{3} \div \frac{7}{12}32÷127:
    - Multiply by the reciprocal: 23×127=2421\frac{2}{3} \times \frac{12}{7} = \frac{24}{21}32×712=2124.
    - Simplify: 2421=87\frac{24}{21} = \frac{8}{7}2124=78.

Result: 87\frac{8}{7}78.

Example 3: (13+16)×34\left(\frac{1}{3} + \frac{1}{6}\right) \times \frac{3}{4}(31+61)×43

1. **Parentheses**: Simplify 13+16\frac{1}{3} + \frac{1}{6}31+61:
    - Find the LCD of 3 and 6: LCD = 6.
    - Convert: 13=26\frac{1}{3} = \frac{2}{6}31=62.
    - Add: 26+16=36=12\frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}62+61=63=21.
2. **Multiplication**: Multiply 12×34\frac{1}{2} \times \frac{3}{4}21×43:
    - Result: 38\frac{3}{8}83.

Result: 38\frac{3}{8}83.

Converting Fractions to Decimals and Percentages

"Let’s now learn how to convert fractions into decimals and percentages."

Example 1: Convert 34\frac{3}{4}43

1. **Decimal**: Divide 3÷4=0.753 \div 4 = 0.753÷4=0.75.
2. **Percentage**: Multiply 0.75×100=75%0.75 \times 100 = 75\%0.75×100=75%.

Result: 34=0.75=75%\frac{3}{4} = 0.75 = 75\%43=0.75=75%.

Example 2: Convert 65\frac{6}{5}56

1. **Decimal**: Divide 6÷5=1.26 \div 5 = 1.26÷5=1.2.
2. **Percentage**: Multiply 1.2×100=120%1.2 \times 100 = 120\%1.2×100=120%.

Result: 65=1.2=120%\frac{6}{5} = 1.2 = 120\%56=1.2=120%.

Closing
"That’s all for today’s session on the order of operations and fraction conversions. Keep practicing these techniques to strengthen your understanding. Thank you for joining Avidator’s *World of Fractions*. See you next time!"

Part 7

Welcome
"Hello and welcome to Avidator’s *World of Fractions*! In today’s session, we’ll tackle some real-life fraction word problems to help strengthen your understanding of fractions and percentages. Let’s begin!"

Word Problem 1: Sarah and the Pizza

"A pizza was divided into five equal slices. Sarah ate 3 of those slices.
We’ll answer two questions:

1. What fraction of the pizza did Sarah eat?
2. What percentage of the pizza does this represent?"

Solution

1. **Fraction of Pizza Eaten**:
    - Total slices: 5.
    - Slices eaten: 3.
    - Fraction eaten = Slices eatenTotal slices=35\frac{\text{Slices eaten}}{\text{Total slices}} = \frac{3}{5}Total slicesSlices eaten=53.
2. **Percentage of Pizza Eaten**:
    - Convert 35\frac{3}{5}53 to a percentage:
        - 35×100=0.6×100=60%\frac{3}{5} \times 100 = 0.6 \times 100 = 60\%53×100=0.6×100=60%.

Answer: Sarah ate 35\frac{3}{5}53, or 60% of the pizza.

Word Problem 2: The Farmer's Field

"A farmer has a field divided into 12 equal sections. He planted wheat in 7 sections and corn in the remaining sections.
We'll determine:

1. The fraction of the field planted with wheat.
2. The fraction of the field planted with corn."

Solution

1. **Fraction of Field Planted with Wheat**:
    - Total sections: 12.
    - Wheat-planted sections: 7.
    - Fraction of wheat = 712\frac{7}{12}127.
2. **Fraction of Field Planted with Corn**:
    - Corn-planted sections = Total sections - Wheat sections = 12−7=512 - 7 = 512−7=5.
    - Fraction of corn = 512\frac{5}{12}125.

Answer: The field is 712\frac{7}{12}127 wheat and 512\frac{5}{12}125 corn.

Word Problem 3: Emma's Cookies

Emma baked 24 cookies for her friends. She gave 23\frac{2}{3}32 of the cookies to her friends and kept the rest for herself.
We'll answer three questions:

1. How many cookies did Emma give to her friends?
2. What fraction of the cookies did Emma keep for herself?
3. How many cookies did Emma keep?"

Solution

1. **Cookies Given to Friends**:
    - Total cookies: 24.
    - Fraction given = 23\frac{2}{3}32.
    - Cookies given = 23×24=483=16\frac{2}{3} \times 24 = \frac{48}{3} = 1632×24=348=16.
    - Emma gave 16 cookies to her friends.
2. **Fraction of Cookies Emma Kept**:
    - Fraction kept = 1−23=131 - \frac{2}{3} = \frac{1}{3}1−32=31.
3. **Cookies Emma Kept**:
    - Cookies kept = 13×24=243=8\frac{1}{3} \times 24 = \frac{24}{3} = 831×24=324=8.

Answer: Emma gave 23\frac{2}{3}32 of the cookies (16 cookies) to her friends and kept 13\frac{1}{3}31 (8 cookies) for herself.

Closing
"That's all for today's session on fraction word problems! Remember, practicing real-world examples like these helps build a strong understanding of mathematical concepts. Thanks for joining us at Avidator's *World of Fractions*. See you next time!"

Part 8 -

Welcome to Practice Time!
"Let's apply what we've learned with a couple of real-life word problems. Ready to test your fraction skills? Let's get started!"

Word Problem 1: The Water Tank

"A water tank is divided into five equal parts. Currently, 35\frac{3}{5}53 of the tank is filled with water."

We have two questions:

1. What fraction of the tank is still empty?
2. If the tank's total capacity is 50 litres, how many litres of water are in the tank?

Solution

1. **What fraction of the tank is still empty?**
   To find the empty fraction, subtract the filled fraction from 1:
- Empty fraction = 1−35=251 - \frac{3}{5} = \frac{2}{5}1−53=52.
- The fraction of the tank that is still empty is 25\frac{2}{5}52.
2. **How many litres of water are in the tank?**
   To find the litres of water, multiply the filled fraction by the total capacity:
- Litres of water = 35×50=30\frac{3}{5} \times 50 = 3053×50=30.
- There are 30 litres of water in the tank.

Final Answers:

- The fraction of the empty tank is 25\frac{2}{5}52.
- There are 30 litres of water in the tank.

Word Problem 2: The Class of Students

"Out of 40 students in a class, 58\frac{5}{8}85 are boys, and the rest are girls."

We have two questions:

1. How many boys are in the class?
2. What fraction of the class is girls?

Solution

1. **How many boys are in the class?**
   To find the number of boys, multiply the fraction of boys by the total number of students:
- Number of boys = 58×40=25\frac{5}{8} \times 40 = 2585×40=25.
- There are 25 boys in the class.
2. **What fraction of the class is girls?**
   To find the fraction of girls, subtract the fraction of boys from 1:
- Fraction of girls = 1−58=381 - \frac{5}{8} = \frac{3}{8}1−85=83.
- The fraction of the girls' class is 38\frac{3}{8}83.

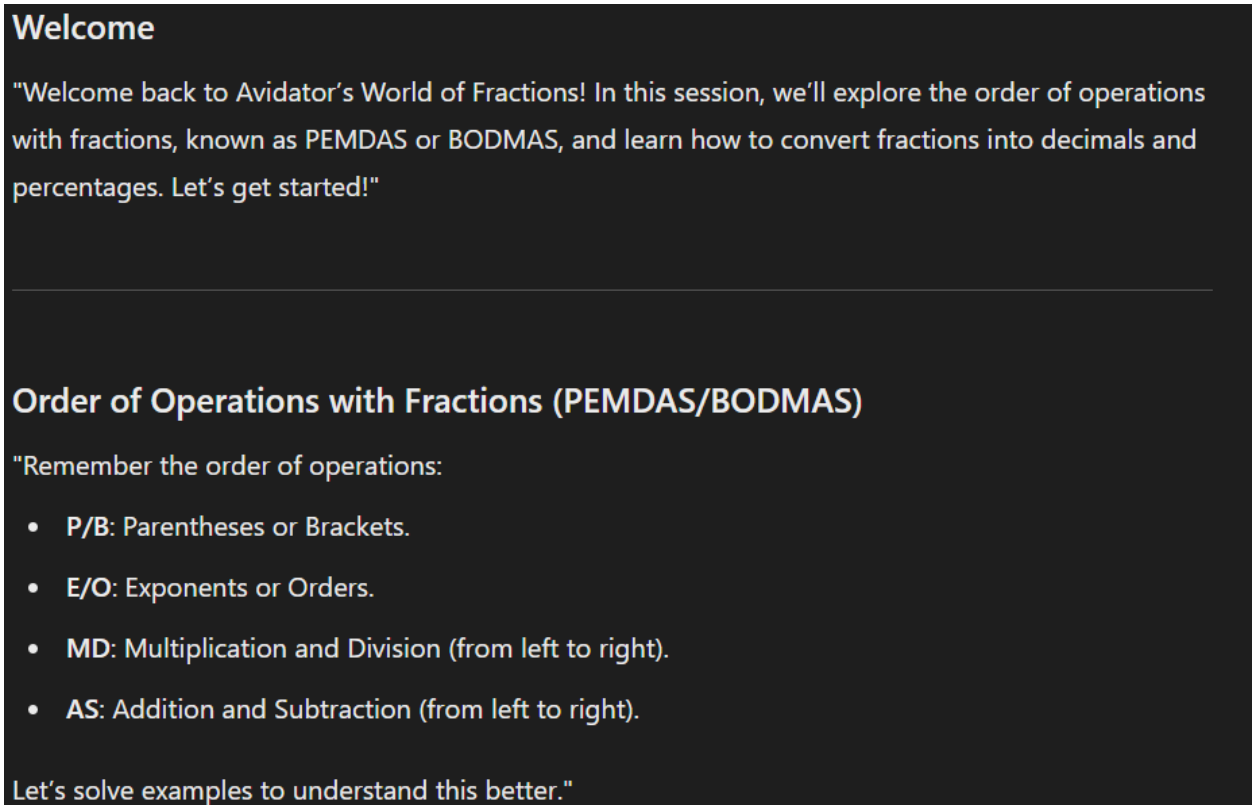
Final Answers:

- There are 25 boys in the class.
- The fraction of the girls' class is 38\frac{3}{8}83.

Closing
"Great job! You've successfully solved these word problems using fractions. Keep practicing to strengthen your understanding of fractions in real-life situations. Thanks for joining, and see you next time!"

Part 6 refined

Normal script -



Voice script - Got it! Here's the script with the mathematical expressions written out in words for the voice script:

Welcome

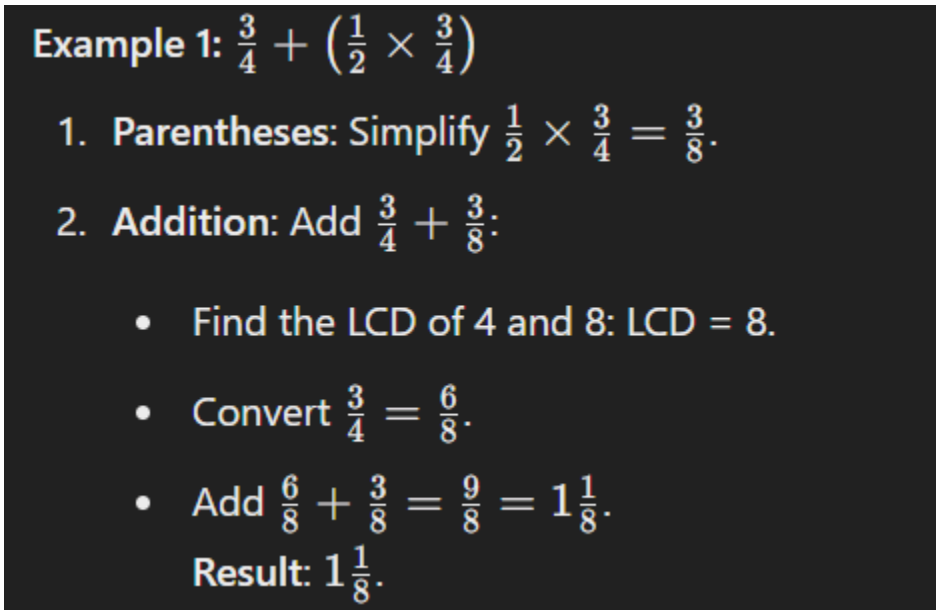
"Welcome back to Avidator's World of Fractions! In this session, we'll explore the order of operations with fractions, known as PEMDAS or BODMAS, and learn how to convert fractions into decimals and percentages. Let's get started!"

Order of Operations with Fractions (PEMDAS/BODMAS)

"Remember the order of operations:

- **P/B**: Parentheses or Brackets.
- **E/O**: Exponents or Orders.
- **MD**: Multiplication and Division (from left to right).
- **AS**: Addition and Subtraction (from left to right).

Let's solve examples to understand this better."



Voice script - Example 1: Three-fourths plus one-half times three-fourths

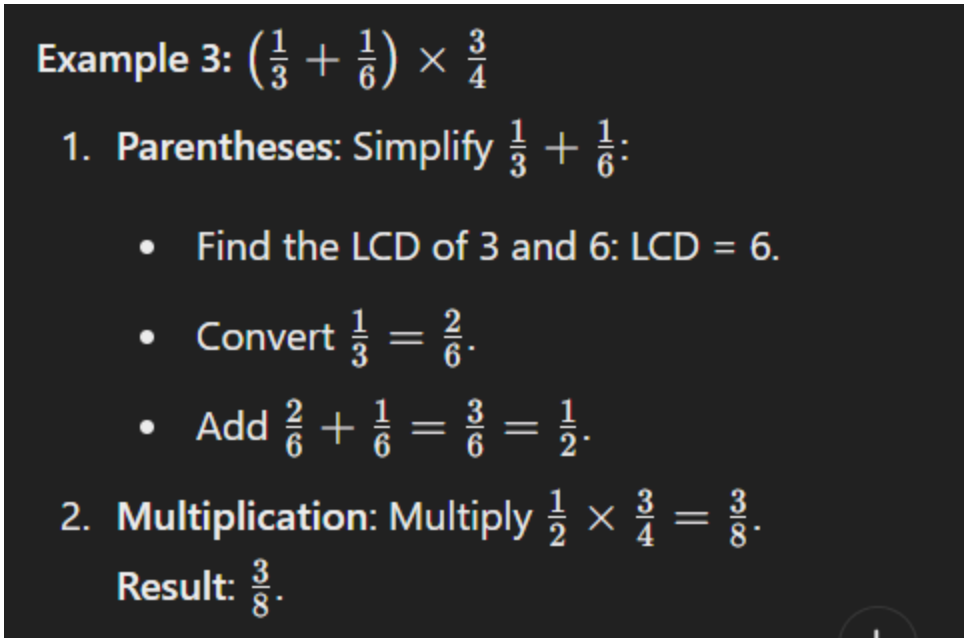
1. Parentheses: Simplify one-half times three-fourths, which equals three-eighths.
2. Addition: Add three-fourths plus three-eighths:
    - Find the least common denominator of four and eight, which is eight.
    - Convert three-fourths to six-eighths.
    - Add six-eighths plus three-eighths, which equals nine-eighths, or one and one-eighth.
      Result: One and one-eighth.

Example 2: $\frac{2}{3} \div \left(\frac{5}{6} - \frac{1}{4}\right)$

1. **Parentheses**: Simplify $\frac{5}{6} - \frac{1}{4}$:
   - Find the LCD of 6 and 4: LCD = 12.
   - Convert $\frac{5}{6} = \frac{10}{12}$ and $\frac{1}{4} = \frac{3}{12}$.
   - Subtract $\frac{10}{12} - \frac{3}{12} = \frac{7}{12}$.
2. **Division**: Divide $\frac{2}{3} \div \frac{7}{12}$:
   - Multiply by the reciprocal: $\frac{2}{3} \times \frac{12}{7} = \frac{24}{21} = \frac{8}{7} = 1\frac{1}{7}$.
     Result: $1\frac{1}{7}$.

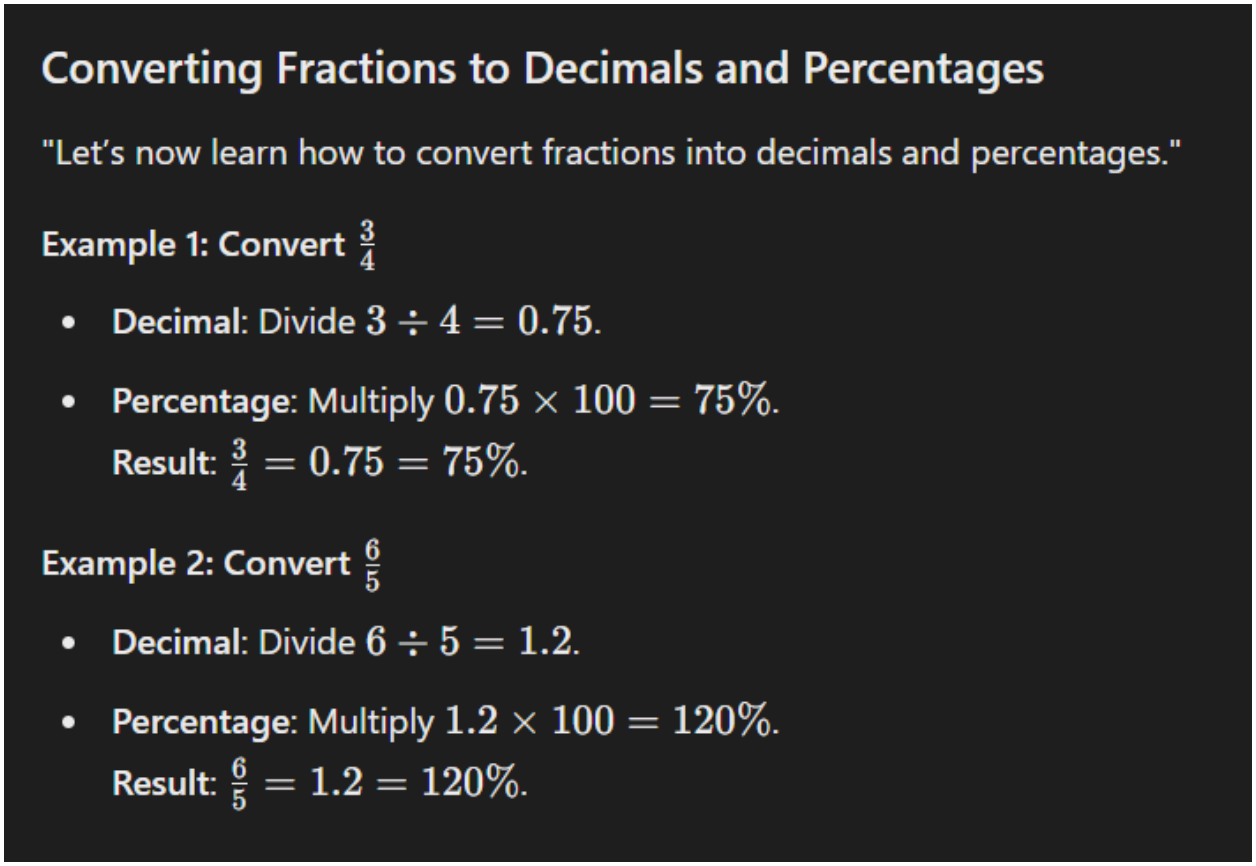
Voice script - Example 2: Two-thirds divided by five-sixths minus one-fourth

1. **Parentheses**: Simplify five-sixths minus one-fourth:
   - Find the least common denominator of six and four, which is twelve.
   - Convert five-sixths to ten-twelfths and one-fourth to three-twelfths.
   - Subtract ten-twelfths minus three-twelfths, which equals seven-twelfths.
2. **Division**: Divide two-thirds by seven-twelfths:
   - Multiply by the reciprocal: two-thirds times twelve-sevenths equals twenty-four twenty-firsts, or eight-sevenths equals one and one-seventh.
     Result: One and one-seventh.



Voice script - Example 3: One-third plus one-sixth times three-fourths

1. **Parentheses**: Simplify one-third plus one-sixth:
    - Find the least common denominator of three and six, which is six.
    - Convert one-third to two-sixths.
    - Add two-sixths plus one-sixth, which equals three-sixths, or one-half.
2. **Multiplication**: Multiply one-half times three-fourths, which equals three-eighths.
   Result: Three-eighths.



Voice script - Converting Fractions to Decimals and Percentages

"Let's now learn how to convert fractions into decimals and percentages."

Example 1: Convert three-fourths

- **Decimal**: Divide three by four, which equals 0.75.
- **Percentage**: Multiply zero point seven five by one hundred, which equals seventy-five percent.
  Result: Three-fourths equals zero point seven five, or seventy-five percent.

Example 2: Convert six-fifths

- **Decimal**: Divide six by five, which equals one point two.
- **Percentage**: Multiply one point two by one hundred, which equals one hundred twenty percent.
  Result: Six-fifths equals one point two, or one hundred twenty percent.

Voice script - Closing

"That's all for today's session on the order of operations and fraction conversions. Keep practicing these techniques to strengthen your understanding. Thank you for joining Avidator's World of Fractions. See you next time!"

Part 7 refined

Welcome

"Hello and welcome to **Avidator's World of Fractions!** Today's session will tackle real-life fraction word problems to strengthen your understanding of fractions and percentages. Let's dive in!"

Word Problem 1: Sarah and the Pizza

"A pizza was divided into **five equal slices**. Sarah ate **three** of those slices.
We'll answer two questions:

> **One.** What fraction of the pizza did Sarah eat?
>
> **Two.** What percentage of the pizza does this represent?"

Solution

Fraction of Pizza Eaten:

- The total slices are five.
- Slices eaten: Three.
- The fraction eaten is three out of five, or three-fifths.

Percentage of Pizza Eaten:

- To convert three-fifths to a percentage:
    - Divide three by five, which equals 0.6.
    - Multiply zero point six by one hundred, which equals sixty percent.

Sarah ate **three-fifths**, or **sixty percent,** of the pizza.

Word Problem 2: The Farmer's Field

"A farmer has a field divided into **twelve equal sections**. He planted **wheat** in seven sections and **corn** in the remaining sections.
We'll determine:

> **One.** The fraction of the field planted with wheat.
>
> **Two**. The fraction of the field planted with corn."

Solution

Fraction of Field Planted with Wheat:

- The total sections is twelve.
- Wheat-planted sections are seven.
- The fraction of wheat equals seven out of twelve, or seven-twelfths.

Fraction of Field Planted with Corn:

- Corn-planted sections equals Total sections minus Wheat sections: Twelve minus Seven equals Five.
- The fraction of corn equals five out of twelve, or five-twelfths.

The answer will be that the field is **seven-twelfths** wheat and **five-twelfths** corn.

Word Problem 3: Emma's Cookies

Emma baked **twenty-four cookies** for her friends. She gave **two-thirds** of the cookies to her friends and kept the rest for herself.
We'll answer three questions:

> **One.** How many cookies did Emma give to her friends?
>
> **Two.** What fraction of the cookies did Emma keep for herself?
>
> **Three.** How many cookies did Emma keep?"

Solution

Cookies Given to Friends:

- Total cookies: Twenty-four.
- Fraction given: Two-thirds.
- Cookies given equals Two-thirds of twenty-four:
    - Multiply twenty-four by two, which equals forty-eight.

    - Divide forty-eight by three, which equals sixteen.

Emma gave **sixteen cookies** to her friends.

Fraction of Cookies Emma Kept:

- Fraction kept is one minus Two-thirds:
    - Subtract two-thirds from one, which equals one-third.

:

- Cookies kept is One-third of twenty-four:
    - Divide twenty-four by three, which equals eight.

Emma gave **two-thirds** of the cookies (sixteen cookies) to her friends and kept **one-third** (eight cookies) for herself.

Closing

"That's all for today's session on fraction word problems! Practicing real-world examples like these helps build a strong understanding of mathematical concepts. Thank you for joining us at **Avidator's World of Fractions**. See you next time!"

Part 8 refined

Welcome to Practice Time!

"Let's apply what we've learned with a couple of real-life word problems. Ready to test your fraction skills? Let's get started!"

Word Problem 1: The Water Tank

"A water tank is divided into **five equal parts**. Currently, **three-fifths** of the tank is filled with water.
We have two questions:

One. What fraction of the tank is still empty?

Two. If the tank's total capacity is fifty litres, how many litres of water are there?"

Solution

What fraction of the tank is still empty?

- To find the empty fraction, subtract the filled fraction from one:
    - One minus three-fifths equals two-fifths.
- The fraction of the tank that is still empty is **two-fifths**.

How many litres of water are in the tank?

- To find the litres of water, multiply the filled fraction by the total capacity:
    - Three-fifths of fifty equals thirty.
- There are **thirty litres** of water in the tank.

Final Answers:

- The fraction of the tank that is still empty is **two-fifths**.
- There are **thirty litres** of water in the tank.

Word Problem 2: The Class of Students

"In a class of **forty students**, **five-eighths** are boys, and the rest are girls.
We have two questions:

> **One.** How many boys are in the class?
>
> **Two.** What fraction of the class are girls?"

Solution

How many boys are in the class?

- To find the number of boys, multiply the fraction of boys by the total number of students:
    - Five-eighths of forty equals twenty-five.
- There are **twenty-five boys** in the class.

What fraction of the class is girls?

- To find the fraction of girls, subtract the fraction of boys from one:
    - One minus five-eighths equals three-eighths.
- The fraction of the class that is girls is **three-eighths**.

Final Answers:

- There are **twenty-five boys** in the class.

- The fraction of the class that is girls is **three-eighths**.

Closing

"Great job! You've successfully solved these word problems using fractions. Keep practicing to strengthen your understanding of fractions in real-life situations. Thanks for joining, and see you next time!"

Comparing Fractions

🎤 Voice-Over:

"Hello, welcome to Avidator! Have you ever wondered how to compare fractions? 🤔 Today, we're going to learn how!

But wait—before we compare them, we must do something important… make their denominators the same!

Don't worry! I'll show you how to do it step by step. Let's get started!"*

📖 **Content:**
To compare fractions, we need to ensure they have the same denominator. If the denominators differ, we must find a common denominator before comparing the fractions.

Today, we will compare three-fourths (3/4) and five-sixths (5/6) to see which is bigger!

[STEP 1: Find the Least Common Denominator (LCD)]

🎤 **Voice-Over:**
"First, we must find a common denominator for 3/4 and 5/6. That means we're looking for a number that both **4 and 6** can divide into. This is called the **Least Common Denominator (LCD).**

Let's list the multiples of each number to find the smallest one they share:

- **Multiples of 4:** 4, **8, 12**, 16, 20…
- **Multiples of 6:** 6, **12**, 18, 24…

The smallest number in both lists is **12!** So, our LCD is **12**."

📖 **Content:**
The **Least Common Denominator (LCD)** is the smallest number that both denominators can evenly divide into. We found that **12** is the LCD for 4 and 6. Now, we will convert both fractions to have **12** as the denominator.

[STEP 2: Convert the Fractions]

🎤 **Voice-Over:**
"Now, let's change both fractions to have 12 as the denominator.

Let's start with **three-fourths (3/4):**

- Since **4 × 3 = 12**, we must multiply the numerator by 3.
- So, **3 × 3 = 9**.
- That means **3/4 is the same as 9/12**.

Now, let's do the same for **five-sixths (5/6):**

- Since **6 × 2 = 12**, we must multiply the numerator by 2.
- So, **5 × 2 = 10**.
- That means **5/6 is the same as 10/12**.

Now, we have two fractions with the same denominator: **9/12 and 10/12**!"

📖 **Content:**
To compare fractions, we must **make their denominators the same** so we can easily compare their sizes. We did this by multiplying the numerator and denominator of each fraction by the right number to get **12** as the new denominator.

Now, we are ready to compare **9/12** and **10/12**.

[STEP 3: Compare the Two Fractions]

🎤 **Voice-Over:**
"Now that we have **9/12** and **10/12**, we can compare them easily! Since the denominators are the same, we only need to look at the numerators.

- **9 is smaller than 10**, so **9/12 is less than 10/12**.
- That means **3/4 is smaller than 5/6**.
- Or, **5/6 is greater than 3/4!** 🎉

So, if you had two yummy chocolate bars and one was cut into **four pieces** while the other was cut into **six pieces**, a bigger fraction of the second chocolate bar means **more chocolate for you!** 😋"

📖 **Content:**
When two fractions have the same denominator, we only compare their **numerators** (the top numbers). Since **nine is smaller than 10**, we now know that:

3/4 < 5/6
OR
5/6 > 3/4

This means **five-sixths (5/6) is greater than three-fourths (3/4).**

Ordering Fractions: Smallest to Largest

[INTRO]

🎤 **Voice-Over:**
*"Now that we know how to **compare fractions**, let's take it further! What if we have **more than two fractions** and must **arrange them from smallest to largest**? 🤔

Don't worry—it's like comparing fractions, but with one extra step! Today, we'll **order 1/3, 4/5, and 2/7 from least to greatest**. Let's go!"*

📖 **Content:**
Once we learn to **compare two fractions**, we can also **order multiple fractions** by following these steps:
1️⃣ **Find a common denominator** so we can compare them easily.
2️⃣ **Convert the fractions** to have that denominator.
3️⃣ **Compare the numerators** and arrange them in order.

[STEP 1: Find the Least Common Denominator (LCD)]

🎤 **Voice-Over:**
*First, we must find a **common denominator** for 1/3, 4/5, and 2/7. The **Least Common Denominator (LCD)** is the smallest number that all three denominators can divide into.

Let's list the multiples of **3, 5, and 7** to find the LCD!*

- *Multiples of 3: 3, 6, 9, 12, …, **105**, …*
- *Multiples of 5: 5, 10, 15, 20, …, **105**, …*

- *Multiples of 7: 7, 14, 21, 28, …, **105**, …*

*The smallest number they all share is **105!** So, our LCD is **105**."*

📖 **Content:**
The **Least Common Denominator (LCD)** is the **smallest number** that all denominators can evenly divide into.

- The **LCD of 3, 5, and 7 is 105**.
- Now, we will **convert all fractions** to have **105 as the denominator**.

[STEP 2: Convert the Fractions]

🎤 **Voice-Over:**
*"Now that we know the denominator should be **105**, let's change all three fractions!*

👉 **For 1/3:**

- Since **3 × 35 = 105**, we multiply the numerator by 35.
- **1 × 35 = 35**, so **1/3 becomes 35/105**.

👉 **For 4/5:**

- Since **5 × 21 = 105**, we multiply the numerator by 21.
- **4 × 21 = 84**, so **4/5 becomes 84/105**.

👉 **For 2/7:**

- Since **7 × 15 = 105**, we multiply the numerator by 15.
- **2 × 15 = 30**, so **2/7 becomes 30/105**.

Now, we have:
➡ **1/3 = 35/105**

➡ **4/5 = 84/105**
➡ **2/7 = 30/105**

Great! Now we can compare them easily!"*

📖 **Content:**
To compare fractions, we must **make their denominators the same**.

- **1/3 is converted to 35/105**.
- **4/5 is converted to 84/105**.
- **2/7 is converted to 30/105**.

Now, we can **compare the numerators**!

[STEP 3: Compare the Fractions]

🎤 **Voice-Over:**
*"Now that all fractions have the same denominator (**105**), let's look at their numerators:

- **30/105**
- **35/105**
- **84/105**

We simply arrange them from smallest to largest:
30 < 35 < 84

So, the order of the fractions is:
2/7 < 1/3 < 4/5

That means **2/7 is the smallest fraction**, followed by **1/3**, and **4/5 is the largest**.

Imagine these fractions represent **pieces of a pizza** 🍕. You'd have the smallest portion if you got **2/7 of a pizza**. If you got **4/5**, you'd have the biggest slice—lucky you! 😋"*

📖 **Content:**
When the denominators are the **same**, we just compare the **numerators**. Since **30 < 35 < 84**, the fractions in order from smallest to largest are:

➡ **2/7 < 1/3 < 4/5**

Mathematical Operations with Fractions

1) Adding Fractions: Step by Step

[INTRO]

🎤 **Voice-Over:**
*"Now that we've learned how to **compare and order fractions**, it's time to do something cool—**perform mathematical operations** with them!

Today, we'll start with **adding fractions**. It's super easy if you follow the steps! Let's learn how to add **3/4 + 2/7** together!"*

📖 **Content:**
When adding fractions, we follow these steps:
1️⃣ **Find the Least Common Denominator (LCD)**.
2️⃣ **. Convert the fractions** to have the same denominator.
3️⃣ . **Add the numerators** while keeping the denominator the same.

[STEP 1: Find the Least Common Denominator (LCD)]

🎤 **Voice-Over:**
*"Like before, we must find a **common denominator** before adding fractions. The **Least Common Denominator (LCD)** is the smallest number that both denominators can divide into.

Let's list the multiples of **4 and 7** to find the LCD!*

- *Multiples of 4: 4, 8, 12, 16, 20, 24, **28**, …*
- *Multiples of 7: 7, 14, 21, **28**, …*

*The smallest number they both share is **28!** So, our LCD is **28**."*

📖 **Content:**
The **Least Common Denominator (LCD)** is the **smallest number** that both denominators can evenly divide into.

- The **LCD of 4 and 7 is 28**.
- Now, we will **convert both fractions** to have **28 as the denominator**.

[STEP 2: Convert the Fractions]

🎤 **Voice-Over:**
*"Now that we know the denominator should be **28**, let's change both fractions!*

👉 **For 3/4:**

- Since **4 × 7 = 28**, we multiply the numerator by 7.
- **3 × 7 = 21**, so **3/4 becomes 21/28**.

👉 **For 2/7:**

- Since **7 × 4 = 28**, we multiply the numerator by 4.
- **2 × 4 = 8**, so **2/7 becomes 8/28**.

Now, we have:
➡ **3/4 = 21/28**
➡ **2/7 = 8/28**

Great! Now we can add them!"*

📖 **Content:**
To add fractions, we must **make their denominators the same**.

- **3/4 is converted to 21/28**.
- **2/7 is converted to 8/28**.

Now, we can **add the numerators**!

[STEP 3: Add the Numerators]

🎤 **Voice-Over:**
*"Now that both fractions have the **same denominator**, we simply **add the numerators**!

- **21 + 8 = 29**

Since the denominator stays the same, we get:
29/28

Wait a minute! That's an **improper fraction**, which means the numerator is **bigger than the denominator**. We can convert it into a **mixed number**."*

📖 **Content:**
When the denominators are **the same**, we just **add the numerators** while keeping the denominator unchanged:

➡ **21/28 + 8/28 = 29/28**

Since **29 is greater than 28**, we write it as a **mixed number**:

- **29 ÷ 28 = 1 remainder 1**, so
- **29/28 = 1 1/28**.

Subtracting Fractions: Step by Step

[INTRO]

🎤 **Voice-Over:**
*"Now that we know how to **add fractions**, let's learn how to **subtract them**!

Subtracting fractions is just like adding—we must **find a common denominator** first. Let's see how to solve **3/4 - 2/7** step by step!"*

📖 **Content:**
When subtracting fractions, we follow these steps:
1️⃣ **Find the Least Common Denominator (LCD).**
2️⃣ . **Convert the fractions** to have the same denominator.
3️⃣ . **Subtract the numerators** while keeping the denominator the same.

[STEP 1: Find the Least Common Denominator (LCD)]

🎤 **Voice-Over:**
*"Before subtracting, we need to **make the denominators the same**.

Let's find the **least common denominator (LCD)**, the smallest number that the two denominators can divide into.

- *Multiples of 4: 4, 8, 12, 16, 20, 24, **28**, …*
- *Multiples of 7: 7, 14, 21, **28**, …*

*The smallest number they both share is **28!** So, our LCD is **28**."*

📖 **Content:**
The **Least Common Denominator (LCD)** is the **smallest number** that both denominators can evenly divide into.

- The **LCD of 4 and 7 is 28**.
- Now, we will **convert both fractions** to have **28 as the denominator**.

[STEP 2: Convert the Fractions]

🎤 **Voice-Over:**
*"Now that we know the denominator should be **28**, let's change both fractions!*

👉 **For 3/4:**

- Since **4 × 7 = 28**, we multiply the numerator by 7.
- **3 × 7 = 21**, so **3/4 becomes 21/28**.

👉 **For 2/7:**

- Since **7 × 4 = 28**, we multiply the numerator by 4.
- **2 × 4 = 8**, so **2/7 becomes 8/28**.

Now, we have:
➡ **3/4 = 21/28**
➡ **2/7 = 8/28**

Now that the denominators are the same, we can **subtract the numerators**!"*

📖 **Content:**
To subtract fractions, we must **make their denominators the same**.

- **3/4 is converted to 21/28**.
- **2/7 is converted to 8/28**.

Now, we can **subtract the numerators**!

[STEP 3: Subtract the Numerators]

🎤 **Voice-Over:**
*"Now that both fractions have the **same denominator**, we simply **subtract the numerators**!

- **21 - 8 = 13**

Since the denominator stays the same, we get:
13/28 🎉

That's our final answer! And since **13/28 is already in its simplest form**, we're done!"*

📖 **Content:**
When the denominators are **the same**, we just **subtract the numerators** while keeping the denominator unchanged:

➡ **21/28 - 8/28 = 13/28**

Since **13/28 cannot be simplified further**, this is the final answer.

Multiplying Fractions: Step by Step

[INTRO]

🎤 **Voice-Over:**
*"We've learned how to **add and subtract fractions**, but what if we need to **multiply** them? 🤔

Multiplying fractions is **easier** than addition or subtraction, because there's no need to find a **common denominator**! 🎉

Let's see how to **multiply 3/4 × 2/7** step by step!"*

📖 **Content:**
When multiplying fractions, follow these **simple steps**:
1️⃣ **Multiply the numerators (top numbers).**
2️⃣ **Multiply the denominators (bottom numbers).**
3️⃣ **Simplify the fraction if possible.**

[STEP 1: Multiply the Numerators]

🎤 **Voice-Over:**
*"To multiply fractions, we start with the **numerators**—the numbers on top.

👉 The numerators in **3/4 × 2/7** are **3 and 2**.

- **3 × 2 = 6**

So, the numerator of our answer will be **6**!"*

📖 **Content:**
To multiply fractions, first **multiply the numerators**:

➡ **3 × 2 = 6**

This gives us the **new numerator**.

[STEP 2: Multiply the Denominators]

🎤 **Voice-Over:**
*"Now, let's multiply the **denominators**—the numbers on the bottom.

👉 The denominators in **3/4 × 2/7** are **4 and 7**.

- **4 × 7 = 28**

So, the denominator of our answer is **28**.

That means our fraction so far is **6/28**!"*

📖 **Content:**
Next, **multiply the denominators**:

➡ **4 × 7 = 28**

This gives us the **new denominator**.

Now, our answer is **6/28**.

[STEP 3: Simplify the Fraction]

🎤 **Voice-Over:**
*"Wait! Before we say we're done, let's check if we can **simplify** the fraction.

We have **6/28**. Let's find the **greatest common factor (GCF)** of 6 and 28.

- Factors of **6**: 1, 2, **3**, **6**
- Factors of **28**: 1, **2**, 4, 7, **14**, 28

The **largest common factor** is **2**! So, we divide both the **numerator and denominator** by **2**:

- **6 ÷ 2 = 3**
- **28 ÷ 2 = 14**

Now, we have **3/14**, which is our final answer!

📖 **Content:**
To simplify **6/28**, divide both numbers by their **Greatest Common Factor (GCF = 2)**:

- **6 ÷ 2 = 3**
- **28 ÷ 2 = 14**

So, the final answer is **3/14**.

Dividing Fractions: Sharing Fractions

[INTRO]

🎤 **Voice-Over:**
*"We've learned to **add, subtract, and multiply fractions**, but what about **division**? 🤔

Dividing fractions may sound tricky, but here's a secret—it's just like **multiplication** with **one extra step**! 🎉

Let's see how to **divide 3/4 ÷ 2/7** step by step!"*

📖 **Content:**
When dividing fractions, follow these **simple steps**:
1️⃣ **Flip the second fraction (find the reciprocal).**
2️⃣ **Change the division sign to multiplication.**
3️⃣ **Multiply the fractions as usual.**
4️⃣ **Simplify if needed.**

[STEP 1: Flip the Second Fraction (Reciprocal)]

🎤 **Voice-Over:**
*"When dividing fractions, we **don't divide directly**—instead, we **flip the second fraction** upside down.

This is called finding the **reciprocal**.

👉 In **3/4 ÷ 2/7**, the second fraction is **2/7**.

- Its **reciprocal** is **7/2** (we swap the numerator and denominator).

So now, our problem changes to:
3/4 × 7/2 🎉"*

📖 **Content:**
To divide fractions, **flip the second fraction** (find the **reciprocal**).

- **2/7 becomes 7/2**.
- Now, change ÷ to ×, so the problem becomes:
  3/4 × 7/2.

[STEP 2: Multiply the Fractions]

🎤 **Voice-Over:**
*"Now that we've turned the division into multiplication, we can **multiply the fractions** just like before!

👉 **Multiply the numerators**:

- **3 × 7 = 21**

👉 **Multiply the denominators**:

- **4 × 2 = 8**

So, we get **21/8**!"*

📖 **Content:**
After flipping the fraction, we multiply:

➡ **3 × 7 = 21** (new numerator)
➡ **4 × 2 = 8** (new denominator)

So, the answer is **21/8**.

[STEP 3: Convert to a Mixed Number (Optional)]

🎤 **Voice-Over:**
*"Wait! Our answer **21/8** is an **improper fraction**, meaning the numerator is bigger than the denominator.

Let's convert it into a **mixed number**!

👉 **How many times does eight fit into 21?**

- **8 × 2 = 16** (that's the closest multiple of 8)
- **21 - 16 = 5** (this is the remainder)

So, we write the answer as:
2 5/8 🎉

That's our final answer!"*

📖 **Content:**
If needed, convert an **improper fraction** into a **mixed number**:

- **21 ÷ 8 = 2 remainder 5**
- Write it as $2\frac{5}{8}$

So, **3/4 ÷ 2/7 =** $2\frac{5}{8}$.

Final Thoughts: Keep Practicing & Keep Growing!

🎤 **Voice-Over:**
*Congratulations on completing your journey through fractions! 🎉

You've learned how to:
✔ **Compare and order fractions**
✔ **Add and subtract fractions**
✔ **Multiply and divide fractions**

These skills are essential in mathematics; with **regular practice**, you'll become more confident in solving fraction problems!

Remember, math is not about being perfect—it's about **understanding, improving, and enjoying learning**. So, keep practicing and challenging yourself!

Thank you for learning with **Avidator's World of Fractions**. We hope to see you again for more fun and engaging math lessons. **Happy learning!** 👋😃"*

📖 **Content:**
That's a wrap! Now, you have a strong foundation in fractions, including:

- **Comparing and ordering fractions**
- **Adding and subtracting fractions**
- **Multiplying and dividing fractions**

Practising **regularly will improve** your math skills and build confidence in solving fraction problems.

Thank you for being a part of Avidator's World of Fractions! See you next time for more exciting learning! 👋😊

✅ Step 1: Multiply the fractions inside the brackets

We are solving:
$12 \times 3 4 \frac{1}{2} \times \frac{3}{4} 21 \times 43$

👉 Multiply the numerators:
$1 \times 3 = 3$

👉 Multiply the denominators:
$2 \times 4 = 8$

✅ So, $12 \times 3 4 = 38 \frac{1}{2} \times \frac{3}{4} = \frac{3}{8} 21 \times 43 = 83$

✅ Step 2: Add $34 + 38 \frac{3}{4} + \frac{3}{8} 43 + 83$

But wait! Before we can add, both fractions must have the same **denominator**!

Let's find the **Least Common Denominator (LCD)**.

🎤 Voice-Over:
"What number can both 4 and 8 go into? Let's list the multiples!"

- Multiples of 4: 4, 8, 12, 16...
- Multiples of 8: 8, 16, 24...

✅ LCD = 8

✅ Step 3: Convert both fractions to have the same denominator

👉 $34 \frac{3}{4} 43$:
$4 \times 2 = 8$
So, multiply numerator by 2: $3 \times 2 = 6$
Now: $34 = 68 \frac{3}{4} = \frac{6}{8} 43 = 86$

$38 \frac{3}{8} 83$ stays the same.

✅ Step 4: Add the numerators

68+38=98\frac{6}{8} + \frac{3}{8} = \frac{9}{8}86+83=89

🎤 Voice-Over:
"Ooh! That's an improper fraction! Let's change it into a mixed number."

9 ÷ 8 = 1 remainder 1
So: 98=118\frac{9}{8} = 1 \frac{1}{8}89=181

✅ Final Answer: **1 1/8**

🎬 Example 2: Dividing Fractions with Brackets

Expression:
23÷(56−14)\frac{2}{3} ÷ (\frac{5}{6} - \frac{1}{4})32÷(65−41)

✅ Step 1: Subtract the fractions inside the brackets

🎤 Voice-Over:
"Let's find the LCD of 6 and 4 so we can subtract easily."

- Multiples of 6: 6, 12, 18…
- Multiples of 4: 4, 8, 12…

✅ LCD = 12

👉 56=1012\frac{5}{6} = \frac{10}{12}65=1210 (6×2 and 5×2)
👉 14=312\frac{1}{4} = \frac{3}{12}41=123 (4×3 and 1×3)

Now subtract:
1012−312=712\frac{10}{12} - \frac{3}{12} = \frac{7}{12}1210−123=127

✅ Step 2: Divide 23÷712\frac{2}{3} ÷ \frac{7}{12}32÷127

🎤 Voice-Over:
"To divide fractions, we multiply by the reciprocal! Flip the second fraction."

23÷712=23×127\frac{2}{3} ÷ \frac{7}{12} = \frac{2}{3} × \frac{12}{7}32÷127=32×712

Now multiply:

👉 Numerators: 2 × 12 = 24
👉 Denominators: 3 × 7 = 21

So: 2421\frac{24}{21}2124

🎤 Voice-Over:
"That's an improper fraction! Let's simplify it."

24 ÷ 21 = 1 remainder 3
✅ Final Answer: **1 3/21** → simplify: **1 1/7**

🎬 Example 3: Add Then Multiply

Expression:
(13+16)×34(\frac{1}{3} + \frac{1}{6}) × \frac{3}{4}(31+61)×43

✅ Step 1: Add 13+16\frac{1}{3} + \frac{1}{6}31+61

🎤 Voice-Over:
"Again, we need the same denominator!"

- Multiples of 3: 3, 6, 9...
- LCD = 6

👉 13=26\frac{1}{3} = \frac{2}{6}31=62
16=16\frac{1}{6} = \frac{1}{6}61=61

Now add:
26+16=36=12\frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}62+61=63=21

✅ Step 2: Multiply 12×34\frac{1}{2} × \frac{3}{4}21×43

👉 Numerators: 1 × 3 = 3
👉 Denominators: 2 × 4 = 8

✅ Final Answer: **38\frac{3}{8}83**

🎬 Converting Fractions to Decimals & Percentages

✅ Example 1: Convert 34\frac{3}{4}43

🎤 Voice-Over:
"Let's turn this fraction into a decimal and percentage!"

- Divide: 3 ÷ 4 = 0.75
- Multiply: 0.75 × 100 = 75%

✅ Result:
Decimal: 0.75
Percentage: 75%

✅ Example 2: Convert 65\frac{6}{5}56

🎤 Voice-Over:
"This is an improper fraction, but that's okay!"

- Divide: 6 ÷ 5 = 1.2
- Multiply: 1.2 × 100 = 120%

✅ Result:
Decimal: 1.2
Percentage: 120%