

Adding, Subtracting & Multiplying Fractions

Fill in each part when its number appears on the slide.

PART 1 • TARGET

I can add, subtract, and multiply fractions with unlike denominators and use them to solve real-world problems.

PART 2 • WARM-UP

- Write two fractions equivalent to $\frac{1}{2}$.
Key: Examples: $\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{8}$.
- Which is greater, $\frac{2}{3}$ or $\frac{3}{5}$? Show how you know.
Key: $\frac{2}{3}$ ($\frac{10}{15}$ vs. $\frac{9}{15}$), or $\frac{2}{3} \sim 0.67 > 0.6$.
- What is 3×4 , and what is $\frac{1}{2}$ of 12?
Key: 12 and 6.

PART 3 • PREDICTION

You ate $\frac{1}{2}$ of a pizza and your friend ate $\frac{1}{3}$. Did you eat $\frac{2}{5}$ together?

Circle one: ☐ Yes, $\frac{2}{5}$ ☐ No, more than $\frac{2}{5}$ ☐ No, less than $\frac{2}{5}$

PART 4 • VOCABULARY

Word	Meaning
Denominator	The bottom number: how many equal parts make a whole.
Numerator	The top number: how many parts we have.
Common denominator	A shared multiple of the denominators, used to add or subtract.
Equivalent fractions	Fractions that name the same amount ($\frac{1}{2} = \frac{3}{6}$).

PART 5 • SAME-SIZE PIECES

To add fractions, I need a COMMON DENOMINATOR.

Check: What is a common denominator for $\frac{1}{3}$ and $\frac{1}{4}$?

Circle one: (A) 3 (B) 1 (C) 12 (D) 7

Key: (C) 12. 12 is the least common multiple of 3 and 4.

PART 6 • RENAME, THEN ADD

Add the NUMERATORS. The DENOMINATOR stays the same.

Check: $\frac{1}{3} + \frac{1}{4} = ?$ (write a fraction)

Answer: _____

Key: $\frac{7}{12}$. $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$.

PART 7 • MIXED NUMBERS

When subtracting mixed numbers, I can REGROUP 1 whole as a fraction like $\frac{4}{4}$.

Check: $3\frac{1}{4} - 1\frac{3}{4} = ?$ (mixed number)

Answer: _____

Key: $1\frac{2}{4}$. $2\frac{5}{4} - 1\frac{3}{4} = 1\frac{2}{4} = 1\frac{1}{2}$.

PART 8 • MULTIPLY FRACTIONS

To multiply fractions, multiply the NUMERATORS and the DENOMINATORS.

Check: $\frac{2}{3} \times \frac{3}{4} = ?$ (simplest form)

Answer: _____

Key: $\frac{1}{2}$. $\frac{6}{12} = \frac{1}{2}$.

PART 9 • WORKED EXAMPLE

1. Problem: $\frac{1}{2} + \frac{1}{3}$.
2. Step 1: Halves and thirds are different sizes. Both fit into sixths.
3. Step 2: $\frac{1}{2} = \frac{3}{6}$ and $\frac{1}{3} = \frac{2}{6}$.
4. Step 3: $\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$.
5. Check: $\frac{5}{6}$ is close to 1, and half a pizza plus a third is almost a whole. $\frac{2}{5}$ was wrong.

PART 10 • WE DO

Solve: $2\frac{1}{3} + 1\frac{3}{4}$.

Answer: $4\frac{1}{12}$

PART 11 • YOU DO

Solve: $\frac{3}{4} - \frac{1}{3}$ (write a fraction)

Answer: _____

Key: $\frac{5}{12}$. $\frac{9}{12} - \frac{4}{12} = \frac{5}{12}$.

PART 12 • WORK TIME: FRACTION TRAIL QUEST

Write each code piece as you earn it: Level 1: T Level 2: R Level 3: A Level 4: I Level 5: L

Final code: TRAIL

PART 13 • WRAP-UP

Was your prediction in Part 3 right? One thing I learned today:

Key: 12 and 6.