

Fraction Mix-Up

Use equivalent fractions to add and subtract with unlike denominators.

GRADE 5 • NY-5.NF.1

NY-5.NF.1 "Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators."

NAME _____

DATE _____

MAKE LIKE DENOMINATORS

To add or subtract fractions, first rewrite them with the same denominator. Use equivalent fractions, then add or subtract the numerators and simplify the result.

WORKED EXAMPLE

Find $\frac{2}{3} + \frac{1}{4}$.

1. The least common denominator of 3 and 4 is 12.
2. Rewrite: $\frac{2}{3} = \frac{8}{12}$ and $\frac{1}{4} = \frac{3}{12}$.
3. Add the numerators: $\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$.

Answer: $\frac{11}{12}$

PRACTICE 6 problems

1 Find $\frac{3}{5} + \frac{1}{2}$.

ANSWER _____

2 Find $\frac{7}{8} - \frac{1}{6}$.

ANSWER _____

3 Find $1\frac{1}{5} + \frac{3}{10}$.

ANSWER _____

4 Find $2\frac{3}{7} - 1\frac{1}{14}$.

ANSWER _____

5 Find $\frac{5}{12} + \frac{7}{18}$.

ANSWER _____

6 Find $4\frac{5}{9} - 2\frac{1}{6}$.

ANSWER _____

APPLY IT Show your work

- 1** During a game design club meeting, Niko spends $\frac{3}{4}$ hour drawing characters and $\frac{2}{5}$ hour testing the game. How much time does Niko spend on both activities?

WORK SPACE

ANSWER _____

- 2** A water bottle holds $3\frac{1}{2}$ liters. After practice, Zara drinks $1\frac{2}{3}$ liters. How much water is left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A craft club has $4\frac{1}{2}$ yards of ribbon. The club uses $1\frac{3}{4}$ yards for posters and $\frac{5}{6}$ yard for badges. How many yards of ribbon are left?

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find $3/5 + 1/2$.	1 1/10
2	Find $7/8 - 1/6$.	17/24
3	Find $1\ 1/5 + 3/10$.	1 1/2
4	Find $2\ 3/7 - 1\ 1/14$.	1 5/14
5	Find $5/12 + 7/18$.	29/36
6	Find $4\ 5/9 - 2\ 1/6$.	2 7/18

PART 2 • APPLY IT

- 1 3/20 hours** Use 20 as the common denominator. Add $15/20$ and $8/20$ to get $23/20$, or $1\ 3/20$.
- 1 5/6 liters** Use 6 as the common denominator. Subtract $1\ 4/6$ from $3\ 3/6$ to get $1\ 5/6$.

CHALLENGE

1 11/12 yards

Accept equivalent simplified answers, including improper fractions when they are correct. For mixed-number subtraction, accept correct regrouping work or conversion to improper fractions.