

Fraction Trail Mix

Add and subtract fractions with different denominators.

GRADE 5 • MA.5.FR.2.1

MA.5.FR.2.1 "Add and subtract fractions with unlike denominators, including mixed numbers and fractions greater than 1, with procedural reliability."

NAME _____

DATE _____

MATCH THE DENOMINATORS

To add or subtract fractions with unlike denominators, rename both fractions using a common denominator. Then add or subtract the numerators and keep the denominator. For mixed numbers, work with the whole numbers and fractions, and regroup one whole if needed when subtracting.

WORKED EXAMPLE

$$5/12 + 7/18$$

1. Find a common denominator: 36.
2. Rename: $5/12 = 15/36$ and $7/18 = 14/36$.
3. Add: $15/36 + 14/36 = 29/36$.

Answer: 29/36

PRACTICE 6 problems

1 $1/4 + 2/3 = \underline{\hspace{2cm}}$

ANSWER _____

2 $7/10 - 1/6 = \underline{\hspace{2cm}}$

ANSWER _____

3 $1\frac{3}{8} + 2\frac{1}{6} = \underline{\hspace{2cm}}$

ANSWER _____

4 $4\frac{1}{5} - 2\frac{3}{4} = \underline{\hspace{2cm}}$

ANSWER _____

5 $9/14 + 5/21 = \underline{\hspace{2cm}}$

ANSWER _____

6 $3\frac{2}{9} - 7/12 = \underline{\hspace{2cm}}$

ANSWER _____

APPLY IT Show your work

- 1** Maya spent $\frac{3}{8}$ hour designing a game level and $\frac{5}{12}$ hour testing it. How much time did she spend altogether?

WORK SPACE

ANSWER _____

- 2** The robotics team had $4\frac{1}{2}$ meters of wire. They used $1\frac{3}{4}$ meters to build a robot. How much wire was left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

On a hiking game, a player needs to travel $5\frac{1}{6}$ miles. The player travels $1\frac{3}{4}$ miles on Saturday and $2\frac{2}{3}$ miles on Sunday. How many miles are left?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$1/4 + 2/3 = \underline{\hspace{1cm}}$	11/12
2	$7/10 - 1/6 = \underline{\hspace{1cm}}$	8/15
3	$1\ 3/8 + 2\ 1/6 = \underline{\hspace{1cm}}$	3 13/24
4	$4\ 1/5 - 2\ 3/4 = \underline{\hspace{1cm}}$	1 9/20
5	$9/14 + 5/21 = \underline{\hspace{1cm}}$	37/42
6	$3\ 2/9 - 7/12 = \underline{\hspace{1cm}}$	2 23/36

PART 2 • APPLY IT

- 19/24 hour** Use 24 as the common denominator. Add $9/24$ and $10/24$ to get $19/24$ hour.
- 2 3/4 meters** Rename $4\ 1/2$ as $4\ 2/4$. Subtract $1\ 3/4$ from $4\ 2/4$ by regrouping one whole.

CHALLENGE

3/4 mile

Accept equivalent fraction forms, but students should simplify final answers when possible. For mixed-number subtraction, accept correct regrouping work or an equivalent improper-fraction method.