

Mixed Number Moves

Add and subtract mixed numbers with like denominators.

GRADE 4 • 4.NF.B.3c

CCSS.Math.Content.4.NF.B.3c "Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction."

NAME _____

DATE _____

ADD, SUBTRACT, REGROUP

When you add mixed numbers with like denominators, add the whole numbers and add the fractions. If the fraction is 1 whole or more, regroup. When you subtract, trade 1 whole for a fraction with the same denominator if you need to.

WORKED EXAMPLE

$$4\frac{7}{12} + 2\frac{8}{12}$$

1. Add the whole numbers: $4 + 2 = 6$.
2. Add the fractions: $\frac{7}{12} + \frac{8}{12} = \frac{15}{12} = 1\frac{3}{12}$.
3. Combine and simplify: $6 + 1\frac{3}{12} = 7\frac{3}{12} = 7\frac{1}{4}$.

Answer: $7\frac{1}{4}$

PRACTICE 6 problems

1 $2\frac{1}{4} + 3\frac{2}{4} =$

ANSWER _____

2 $5\frac{1}{6} - 2\frac{5}{6} =$

ANSWER _____

3 $1\frac{5}{8} + 4\frac{6}{8} =$

ANSWER _____

4 $7\frac{3}{5} - 2\frac{1}{5} =$

ANSWER _____

5 $6\frac{1}{10} - 3\frac{7}{10} =$

ANSWER _____

6 $3\frac{4}{9} + 2\frac{8}{9} =$

ANSWER _____

APPLY IT Show your work

- 1** Noah spent $2\frac{3}{5}$ hours designing a video game level and $1\frac{4}{5}$ hours testing it. How many hours did he spend altogether?

WORK SPACE

ANSWER _____

- 2** Ava had $6\frac{1}{3}$ yards of fabric for a costume. She used $2\frac{2}{3}$ yards. How much fabric was left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A robotics team has $9\frac{1}{8}$ meters of wire. It uses $2\frac{7}{8}$ meters for one robot and $3\frac{5}{8}$ meters for another robot. How many meters of wire are left?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$2\frac{1}{4} + 3\frac{2}{4} =$	5 $\frac{3}{4}$
2	$5\frac{1}{6} - 2\frac{5}{6} =$	2 $\frac{1}{3}$
3	$1\frac{5}{8} + 4\frac{6}{8} =$	6 $\frac{3}{8}$
4	$7\frac{3}{5} - 2\frac{1}{5} =$	5 $\frac{2}{5}$
5	$6\frac{1}{10} - 3\frac{7}{10} =$	2 $\frac{2}{5}$
6	$3\frac{4}{9} + 2\frac{8}{9} =$	6 $\frac{1}{3}$

PART 2 • APPLY IT

- 4 $\frac{2}{5}$ hours** Add the whole numbers, $2 + 1 = 3$. Then add $\frac{3}{5} + \frac{4}{5} = 1\frac{2}{5}$, so the total is $4\frac{2}{5}$ hours.
- 3 $\frac{2}{3}$ yards** Trade 1 whole from $6\frac{1}{3}$ to make $5\frac{4}{3}$. Then subtract $5\frac{4}{3} - 2\frac{2}{3} = 3\frac{2}{3}$ yards.

CHALLENGE

2 $\frac{5}{8}$ meters

Accept equivalent fractions and improper fractions if the value is correct. Students may regroup by using improper fractions or by trading one whole for a fraction with the same denominator.