LESSON MAKER PRO

Fraction Trail Mix

Add and subtract mixed numbers with like denominators.

GRADE 4 · 4.CE.3.b

4.CE.3.b "Estimate, represent, solve, and justify solutions to single-step contextual problems using addition and subtraction with fractions (proper or improper) and/or mixed numbers, having like denominators limited to 2, 3, 4, 5, 6, 8, 10, and 12..."

NAME _____ DATE _____

SAME DENOMINATOR STRATEGY

When denominators are the same, add or subtract the numerators and keep the denominator. If you need to subtract a larger fraction, trade 1 whole for a fraction with the same denominator, then simplify your answer.

WORKED EXAMPLE

Solve: 5 1/8 - 2 6/8

1. Trade 1 whole: 5 1/8 = 4 9/8.
2. Subtract: 4 9/8 - 2 6/8 = 2 3/8.
3. 3/8 is already simplified.

Answer: 2 3/8

PRACTICE 6 problems

1 Solve and simplify: 3/5 + 1/5

ANSWER _____

2 Solve and simplify: 7/10 - 3/10

ANSWER _____

3 Solve and simplify: 1 2/3 + 2/3

ANSWER _____

4 Solve and simplify: 2 1/4 + 1 2/4

ANSWER _____

5 Solve and simplify: 4 1/6 - 2 5/6

ANSWER _____

6 Solve and simplify: 3 3/12 + 1 8/12

ANSWER _____

APPLY IT Show your work

1 At a game design club, Leo spent 1 4/5 hours making a character and 2 3/5 hours testing it. Estimate the total by rounding each mixed number to the nearest whole. Then find the exact total time. Simplify.

WORK SPACE

ANSWER _____

2 A garden team has 5 1/4 yards of compost. They put 2 3/4 yards in planters. How many yards of compost are left? Show how you regroup and simplify.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student says that 4 1/3 - 2 5/3 = 2 4/3. Is the student correct? Explain your reasoning.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Trail Mix

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Solve and simplify: 3/5 + 1/5	**4/5**
2	Solve and simplify: 7/10 - 3/10	**2/5**
3	Solve and simplify: 1 2/3 + 2/3	**2 1/3**
4	Solve and simplify: 2 1/4 + 1 2/4	**3 3/4**
5	Solve and simplify: 4 1/6 - 2 5/6	**1 1/3**
6	Solve and simplify: 3 3/12 + 1 8/12	**4 11/12**

PART 2 · APPLY IT

1. **Estimate: 5 hours. Exact total: 4 2/5 hours.** Round 1 4/5 to 2 and 2 3/5 to 3 for an estimate of 5 hours. Add the exact times: 1 4/5 + 2 3/5 = 4 2/5 hours.
2. **2 1/2 yards** Regroup 5 1/4 as 4 5/4. Then subtract: 4 5/4 - 2 3/4 = 2 2/4 = 2 1/2 yards.

CHALLENGE

No. Regroup 4 1/3 as 2 7/3, then subtract: 2 7/3 - 2 5/3 = 2/3.

Accept correct regrouping shown in any valid form, such as trading one whole for 8/8. Require simplified final answers, and accept 5 hours as the estimate in the first word problem.