LESSON MAKER PRO

Fraction Trade-Offs

Add, subtract, and check mixed numbers

GRADE 4 · 4.NF.B.15.b

4.NF.B.15.b "Add and subtract fractions and mixed numbers with like denominators using fraction equivalence, properties of operations, and the relationship between addition and subtraction."

NAME _____ DATE _____

TRADE ONE WHOLE

When denominators match, add or subtract the numerators and keep the denominator. If your answer has enough fractional parts to make a whole, trade those parts for one whole. To subtract, you may first need to trade one whole for fractional parts.

WORKED EXAMPLE

Find 2 7/9 + 1 5/9.

1. Add the whole numbers: 2 + 1 = 3.
2. Add the fractions: 7/9 + 5/9 = 12/9 = 1 3/9.
3. Combine and simplify: 3 + 1 3/9 = 4 3/9 = 4 1/3.

Answer: 4 1/3

PRACTICE 6 problems

1 Find 2/5 + 1/5.

ANSWER _____

2 Find 7/8 - 3/8.

ANSWER _____

3 Find 1 3/4 + 2 2/4.

ANSWER _____

4 Find 4 1/6 - 2 5/6.

ANSWER _____

5 Find 2 7/10 + 1 8/10.

ANSWER _____

6 Find the missing number: 3 2/12 - ___ = 1 9/12.

ANSWER _____

APPLY IT Show your work

1 At the school fair, one stand sells 1 5/8 liters of lemonade in the morning and 2 7/8 liters in the afternoon. How many liters does it sell in all?

WORK SPACE

ANSWER _____

2 A class has 5 1/4 meters of ribbon for a project. The class uses 2 3/4 meters. How many meters of ribbon are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A class uses 2 5/6 meters of ribbon on Friday and some on Saturday. The class uses 5 1/6 meters in all. How much ribbon does it use on Saturday? Write an addition sentence to check your answer.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Trade-Offs

GRADE 4 · 4.NF.B.15.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 2/5 + 1/5.	**3/5**
2	Find 7/8 - 3/8.	**1/2**
3	Find 1 3/4 + 2 2/4.	**4 1/4**
4	Find 4 1/6 - 2 5/6.	**1 1/3**
5	Find 2 7/10 + 1 8/10.	**4 1/2**
6	Find the missing number: 3 2/12 - ___ = 1 9/12.	**1 5/12**

PART 2 · APPLY IT

1. **4 1/2 liters** Add 1 5/8 + 2 7/8 = 3 12/8. Trade 8/8 for one whole and simplify 4 4/8 to 4 1/2.
2. **2 1/2 meters** Trade one whole to write 5 1/4 as 4 5/4. Then subtract 2 3/4 to get 2 2/4, or 2 1/2 meters.

CHALLENGE

2 1/3 meters; 2 5/6 + 2 1/3 = 5 1/6.

Accept equivalent fractions and mixed numbers, including answers that are not simplified. For the challenge, the check must add the Friday and Saturday amounts to make 5 1/6 meters.