LESSON MAKER PRO

Fraction Mission Control

Estimate, add, and subtract mixed-number amounts.

GRADE 5 · 5.CE.2.c

5.CE.2.c "Estimate and solve single-step and multistep contextual problems involving addition and subtraction with fractions (proper or improper) and/or mixed numbers having like and unlike denominators, with and without models..."

NAME _____ DATE _____

FIND A COMMON DENOMINATOR

To add or subtract fractions with unlike denominators, rename them using a common denominator. Then add or subtract the numerators, keep the denominator, and simplify the result. Estimate first by thinking about benchmark fractions such as 0, 1/2, and 1.

WORKED EXAMPLE

1 7/12 + 2 1/4

1. Rename 1/4 as 3/12.
2. Add the fractional parts: 7/12 + 3/12 = 10/12.
3. Combine the whole numbers and fraction: 1 + 2 + 10/12 = 3 10/12.
4. Simplify 10/12 to 5/6.

Answer: 3 5/6

PRACTICE 6 problems

1 3/4 + 1/8 =

ANSWER _____

2 5/6 - 1/3 =

ANSWER _____

3 1 2/5 + 3/10 =

ANSWER _____

4 2 1/3 - 3/4 =

ANSWER _____

5 Estimate, then solve: 5/12 + 1/3 =

ANSWER _____

6 3 1/2 - 1 5/6 =

ANSWER _____

APPLY IT Show your work

1 Maya is making a stop-motion video. She spends 1 1/2 hours filming and 3/4 hour editing. She has 3 hours total. Estimate how much time will be left, then find the exact time left.

WORK SPACE

ANSWER _____

2 A tablet has 1 1/2 GB of free space. A game art file uses 5/6 GB, and a soundtrack file uses 1/4 GB. How much free space is left after both files are saved?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Lina has 4 1/2 minutes of video clips. She cuts 1 2/3 minutes from the beginning and 3/4 minute from the end. How many minutes of clips remain?

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Mission Control

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	3/4 + 1/8 =	**7/8**
2	5/6 - 1/3 =	**1/2**
3	1 2/5 + 3/10 =	**1 7/10**
4	2 1/3 - 3/4 =	**1 7/12**
5	Estimate, then solve: 5/12 + 1/3 =	**about 1; 3/4**
6	3 1/2 - 1 5/6 =	**1 2/3**

PART 2 · APPLY IT

1. **about 1/2 hour; 3/4 hour** Estimate 1 1/2 + 3/4 as about 2 1/2, so about 1/2 hour is left. Exactly, 1 1/2 + 3/4 = 2 1/4, and 3 - 2 1/4 = 3/4.
2. **5/12 GB** The two files use 5/6 + 1/4 = 1 1/12 GB. Subtract 1 1/12 GB from 1 1/2 GB to get 5/12 GB.

CHALLENGE

2 1/12 minutes

Accept reasonable benchmark estimates for the estimate items. Final exact answers should be in simplest form, although equivalent fractions may appear in student work.