LESSON MAKER PRO

Rational Number Missions

Use all four operations to solve fraction and decimal problems.

GRADE 7 · MA.7.NSO.2.3

MA.7.NSO.2.3 "Solve real-world problems involving any of the four operations with rational numbers."

NAME _____ DATE _____

PLAN EACH OPERATION

Use a common denominator before you add or subtract fractions. Keep track of signs, then simplify the result. To divide by a fraction, multiply by its reciprocal.

WORKED EXAMPLE

Evaluate: -3/8 + 5/12

1. Find a common denominator: 24.
2. Rewrite: -3/8 = -9/24 and 5/12 = 10/24.
3. Add: -9/24 + 10/24 = 1/24.

Answer: 1/24

PRACTICE 6 problems

1 Evaluate: -7/10 + 9/14

ANSWER _____

2 Evaluate: 11/13 - (-2/7)

ANSWER _____

3 Evaluate: (-4/9)(-7/11)

ANSWER _____

4 Evaluate: (-14/17) / (7/19)

ANSWER _____

5 Evaluate: 13/18 - 7/9

ANSWER _____

6 Evaluate: -11/14 - 2/7

ANSWER _____

APPLY IT Show your work

1 Mina has 9 1/2 minutes of video clips. She removes 2 1/4 minutes, then divides the remaining clips evenly among 7 highlight reels. How many minutes of clips are in each reel?

WORK SPACE

ANSWER _____

2 A game store gift card has $40.00 on it. A monthly game pass costs $7.25. After paying for 4 months, how much money remains on the gift card?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Evaluate: (-9/11 + 14/17) / (-2/7)

WORK SPACE AND ANSWER

ANSWER KEY

Rational Number Missions

GRADE 7 · MA.7.NSO.2.3

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Evaluate: -7/10 + 9/14	**-2/35**
2	Evaluate: 11/13 - (-2/7)	**103/91**
3	Evaluate: (-4/9)(-7/11)	**28/99**
4	Evaluate: (-14/17) / (7/19)	**-38/17**
5	Evaluate: 13/18 - 7/9	**-1/18**
6	Evaluate: -11/14 - 2/7	**-15/14**

PART 2 · APPLY IT

1. **1 1/28 minutes per reel** Subtract first: 9 1/2 - 2 1/4 = 29/4. Then divide by 7: 29/4 / 7 = 29/28 = 1 1/28.
2. **$11.00** Multiply the monthly cost by 4: $7.25 x 4 = $29.00. Subtract $29.00 from $40.00.

CHALLENGE

-7/374

Accept equivalent mixed-number forms for improper-fraction answers, such as 1 12/91 for 103/91. Fraction answers should be simplified, and accept $11 as equivalent to $11.00.