LESSON MAKER PRO

Rational Number Remix

Use smart grouping to add and subtract positive and negative numbers.

GRADE 7 · 7.NR.1.5

7.NR.1.5 "Apply properties of operations, including part-whole reasoning, as strategies to add and subtract rational numbers."

NAME _____ DATE _____

GROUP PARTS WISELY

When fractions have the same denominator, combine the numerators and keep the denominator. You can reorder or group addends to pair opposites or make whole numbers before you calculate.

WORKED EXAMPLE

-43/47 + 16/47

1. The denominators match, so combine the numerators.
2. (-43 + 16)/47 = -27/47
3. The fraction is already simplified.

Answer: -27/47

PRACTICE 6 problems

1 -3/8 + 7/8

ANSWER _____

2 5/8 - (-1/4)

ANSWER _____

3 -1.7 + 0.9

ANSWER _____

4 2.35 + (-0.35)

ANSWER _____

5 -2 1/3 - 1 1/5

ANSWER _____

6 -0.25 - (-0.75)

ANSWER _____

APPLY IT Show your work

1 Jordan has $10.50 saved for a game add-on. Jordan spends $8.75, then receives a $3.25 refund because of a store error. How much money does Jordan have now?

WORK SPACE

ANSWER _____

2 In a skate competition, Lee's score is -7.5 points after a penalty. Lee earns 9.25 points on the final run. What is Lee's final score?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Use grouping to find -2 3/4 + 1 1/4 + 3/4. Write one grouping that makes the calculation easier.

WORK SPACE AND ANSWER

ANSWER KEY # Rational Number Remix

GRADE 7 · 7.NR.1.5

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	-3/8 + 7/8	**1/2**
2	5/8 - (-1/4)	**7/8**
3	-1.7 + 0.9	**-0.8**
4	2.35 + (-0.35)	**2**
5	-2 1/3 - 1 1/5	**-3 8/15**
6	-0.25 - (-0.75)	**0.5**

PART 2 · APPLY IT

1. **$5.00** Calculate 10.50 - 8.75 + 3.25. Group -8.75 and 3.25 first to get -5.50, then add 10.50.
2. **1.75 points** Add -7.5 and 9.25. The positive score is 1.75 points greater than the penalty.

CHALLENGE

-3/4; sample grouping: (-2 3/4 + 3/4) + 1 1/4 = -2 + 1 1/4 = -3/4

Accept equivalent simplified fractions, mixed numbers, or improper fractions where appropriate. For decimal answers, accept trailing zeros, such as 2.0 for 2.