LESSON MAKER PRO

Rational Number Rally

Use all four operations with positive and negative numbers.

GRADE 7 · 7.NS.A.3

CCSS.Math.Content.7.NS.A.3 "Solve real-world and mathematical problems involving the four operations with rational numbers. 1"

NAME _____ DATE _____

WORK WITH SIGNS

To add or subtract rational numbers, use common denominators for fractions and track the signs. For multiplication and division, multiply or divide the absolute values, then use a positive sign when the signs match and a negative sign when they differ.

WORKED EXAMPLE

Find 7/10 + (-3/8).

1. Use 40 as a common denominator.
2. 7/10 = 28/40 and -3/8 = -15/40.
3. 28/40 + (-15/40) = 13/40.

Answer: 13/40

PRACTICE 6 problems

1 Find -5/6 + 1/4.

ANSWER _____

2 Find 3.2 - (-1.75).

ANSWER _____

3 Find (-4/9) x (-3/8).

ANSWER _____

4 Find (-7/12) / (14/15).

ANSWER _____

5 Find -2 1/3 - 5/6.

ANSWER _____

6 Find 1.5 x (-4/7).

ANSWER _____

APPLY IT Show your work

1 Jay has $18.75 in credit at an online game store. He buys 3 add-on packs that each cost $4.60. How much credit does Jay have left?

WORK SPACE

ANSWER _____

2 A phone has 5 1/4 gigabytes of free space. It downloads 3 video episodes that each use 7/8 gigabyte. How much free space is left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Evaluate: (-11/14 + 2/7) / (-3/5).

WORK SPACE AND ANSWER

ANSWER KEY

Rational Number Rally

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find -5/6 + 1/4.	**-7/12**
2	Find 3.2 - (-1.75).	**4.95**
3	Find (-4/9) x (-3/8).	**1/6**
4	Find (-7/12) / (14/15).	**-5/8**
5	Find -2 1/3 - 5/6.	**-3 1/6**
6	Find 1.5 x (-4/7).	**-6/7**

PART 2 · APPLY IT

1. **$4.95** Multiply 3 x $4.60 to get $13.80. Subtract $13.80 from $18.75.
2. **2 5/8 gigabytes** The episodes use 3 x 7/8 = 21/8, or 2 5/8, gigabytes. Subtract 2 5/8 from 5 1/4.

CHALLENGE

5/6

Accept equivalent fractions and mixed-number or improper-fraction forms when appropriate. For decimal and money answers, accept only values with the correct sign and place value.