

Rational Number Moves

Compute with positive and negative fractions and decimals.

GRADE 7 • MA.7.NSO.2

MA.7.NSO.2 "Add, subtract, multiply and divide rational numbers."

NAME _____

DATE _____

CHOOSE THE OPERATION

To add or subtract fractions, rewrite them with a common denominator, then combine the numerators. To multiply, multiply straight across and simplify. To divide by a fraction, multiply by its reciprocal, and use sign rules to decide whether the answer is positive or negative.

WORKED EXAMPLE

$$-13/20 + 7/15$$

1. The least common denominator is 60.
2. $-13/20 = -39/60$.
3. $7/15 = 28/60$.
4. $-39/60 + 28/60 = -11/60$.

Answer: -11/60

PRACTICE 6 problems

1 $-4/9 + 2/3$

ANSWER _____

2 $5/6 - (-1/6)$

ANSWER _____

3 $(-8/9) * (3/4)$

ANSWER _____

4 $(-5/12) / (1/8)$

ANSWER _____

5 $-2.5 + 4.75$

ANSWER _____

6 $-6.4 / (-0.8)$

ANSWER _____

APPLY IT Show your work

- 1** In a video game, Maya starts a round with -12 points. She earns 19.5 points, then loses 8.25 points. What is her final score?

WORK SPACE

ANSWER _____

- 2** A school club owes \$9.60 for supplies. The four club members split the debt equally. What is each member's change in money?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

$$(-4/9 - 1/9) / (-2/3)$$

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$-4/9 + 2/3$	2/9
2	$5/6 - (-1/6)$	1
3	$(-8/9) * (3/4)$	-2/3
4	$(-5/12) / (1/8)$	-10/3
5	$-2.5 + 4.75$	2.25
6	$-6.4 / (-0.8)$	8

PART 2 • APPLY IT

1. **-0.75 points** Compute $-12 + 19.5 - 8.25$. Maya's final score is -0.75 points.
2. **-\$2.40** Represent the debt as -9.60 and divide by 4. Each member's change in money is -\$2.40.

CHALLENGE

5/6

Accept equivalent fractions, including improper fractions or mixed numbers when they have the correct value. For money, accept -\$2.40 or a statement that each member pays \$2.40.