

Rational Number Moves

Practice every operation with rational numbers.

GRADE 7 • MA.7.NSO.2.2

MA.7.NSO.2.2 "Add, subtract, multiply and divide rational numbers with procedural fluency."

NAME _____

DATE _____

SIGNS AND OPERATIONS

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

WORKED EXAMPLE

$$-7/12 + 5/18$$

1. Use 36 as the common denominator.
2. $-7/12 = -21/36$ and $5/18 = 10/36$.
3. $-21/36 + 10/36 = -11/36$.

Answer: $-11/36$

PRACTICE 6 problems

1 $-13 + 8$

ANSWER _____

2 $17 - (-6)$

ANSWER _____

3 $(-4/9) \times (3/8)$

ANSWER _____

4 $(15/16) \div (-3/4)$

ANSWER _____

5 $-2.4 + 6.75$

ANSWER _____

6 $-3.6 - 1.85$

ANSWER _____

APPLY IT Show your work

- 1** Your game wallet has \$24.50. You buy a character skin for \$8.75, then receive a \$3.20 refund for an item you returned. What is your new balance?

WORK SPACE

ANSWER _____

- 2** A gaming team earns $\frac{3}{4}$ point for each of 8 bonus rounds. Then the team receives a $\frac{5}{6}$ -point penalty. What is the team's final score change?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Compute: $(-2 \frac{1}{4}) \div (\frac{3}{5}) + 1.2$

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$-13 + 8$	-5
2	$17 - (-6)$	23
3	$(-4/9) \times (3/8)$	-1/6
4	$(15/16) \div (-3/4)$	-5/4
5	$-2.4 + 6.75$	4.35
6	$-3.6 - 1.85$	-5.45

PART 2 • APPLY IT

1. **\$18.95** Subtract the purchase, then add the refund. $24.50 - 8.75 + 3.20 = 18.95$.
2. **5 1/6 points** First find the points earned: $8 \times 3/4 = 6$. Then subtract the penalty: $6 - 5/6 = 5 \frac{1}{6}$.

CHALLENGE

-2 11/20

Accept equivalent fractions and decimals where appropriate. For the challenge, accept $-51/20$, $-2 \frac{11}{20}$, or -2.55 .