

Rational Number Remix

Use fraction and decimal operations in different ways.

GRADE 6 • MA.6.NSO.2

MA.6.NSO.2 "Add, subtract, multiply and divide positive rational numbers."

NAME _____

DATE _____

CHOOSE THE RIGHT MOVE

To add or subtract fractions, rewrite them with a common denominator. To multiply fractions, multiply across and simplify. To divide by a fraction, multiply by its reciprocal, and for decimals, line up decimal points when adding or subtracting.

WORKED EXAMPLE

$$7/10 + 3/8$$

1. Find a common denominator: 40.
2. Rewrite: $7/10 = 28/40$ and $3/8 = 15/40$.
3. Add: $28/40 + 15/40 = 43/40$.
4. Write as a mixed number: $1 \frac{3}{40}$.

Answer: $1 \frac{3}{40}$

PRACTICE 6 problems

1 $2/5 + 1/9$

ANSWER _____

2 $17/18 - 5/6$

ANSWER _____

3 $6/11 \times 2/13$

ANSWER _____

4 $5/11 \div 2/13$

ANSWER _____

5 $1.6 + 2.35$

ANSWER _____

6 $4.5 \div 0.15$

ANSWER _____

APPLY IT Show your work

- 1** Andre earns \$18 for editing a team video. He saves $\frac{2}{5}$ of the money for a new headset. How much does he save?

WORK SPACE

ANSWER _____

- 2** For a robotics showcase, a team has $4\frac{1}{2}$ meters of LED strip. Each display needs $\frac{2}{9}$ meter. How many complete displays can get LED strip, and how much strip remains?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A makerspace has $5\frac{1}{4}$ pounds of clay. It uses $\frac{1}{5}$ of the clay for keychain charms. The rest is shared equally among 4 student projects. How many pounds of clay does each project get? Show equations.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$2/5 + 1/9$	23/45
2	$17/18 - 5/6$	1/9
3	$6/11 \times 2/13$	12/143
4	$5/11 \div 2/13$	2 21/22
5	$1.6 + 2.35$	3.95
6	$4.5 \div 0.15$	30

PART 2 • APPLY IT

1. **\$7.20** Multiply \$18 by $2/5$: $18 \times 2/5 = 36/5$. This is \$7.20.
2. **20 complete displays, with 1/18 meter remaining** Divide $4 \frac{1}{2}$ by $2/9$ to get $20 \frac{1}{4}$. Twenty complete displays use $40/9$ meters, leaving $1/18$ meter.

CHALLENGE

1 1/20 pounds

Accept equivalent fraction forms for fraction answers. For problem 4, accept $65/22$ or $2 \frac{21}{22}$, and for the challenge, accept $21/20$ or $1 \frac{1}{20}$.