

Rational Number Remix

Use fractions, decimals, and percents to solve.

GRADE 7 • 7.NR.1

7.NR.1 "Solve relevant, mathematical problems, including multi-step problems, involving the four operations with rational numbers and quantities in any form (integers, percentages, fractions, and decimal numbers)."

NAME _____

DATE _____

PLAN THE STEPS

Work from parentheses outward, then multiply or divide before adding or subtracting. Change a percent to a decimal or fraction, and rewrite fractions or decimals in a common form when that makes the calculation easier.

WORKED EXAMPLE

Solve: $(\frac{7}{10} + 1.4) \div 25\%$

1. Rewrite 25% as 0.25.
2. Rewrite $\frac{7}{10}$ as 0.7.
3. Add: $0.7 + 1.4 = 2.1$.
4. Divide: $2.1 \div 0.25 = 8.4$.

Answer: 8.4

PRACTICE 6 problems

1 Solve: $-3.75 + 2.6$

ANSWER _____

2 Solve: $\frac{4}{9} - \frac{5}{12}$

ANSWER _____

3 Solve: $(-\frac{2}{3}) * (-\frac{15}{8})$

ANSWER _____

4 Solve: $9.6 \div (-1.2)$

ANSWER _____

5 Find 35% of 2.4.

ANSWER _____

6 Solve: $(1.8 - 4.5) * \frac{1}{3}$

ANSWER _____

APPLY IT Show your work

- 1** A digital game store credits Sam's account with \$18.50. Sam buys an add-on listed at \$6.75 that is discounted 20%. How much credit remains?

WORK SPACE

ANSWER _____

- 2** Nia has \$24.00 for art supplies. A sketchbook costs \$8.00 and is 15% off. She buys 2 sketchbooks. How much money does Nia have left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A gaming team wins a \$48 prize. The team spends $\frac{3}{8}$ of the prize on shirts, then divides the rest equally among 5 players. Each player gives 20% of that share to charity. How much does each player keep?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Solve: $-3.75 + 2.6$	-1.15
2	Solve: $4/9 - 5/12$	1/36
3	Solve: $(-2/3) * (-15/8)$	5/4
4	Solve: $9.6 \div (-1.2)$	-8
5	Find 35% of 2.4.	0.84
6	Solve: $(1.8 - 4.5) * 1/3$	-0.9

PART 2 • APPLY IT

1. **\$13.10** $\$6.75 * 0.80 = \5.40 after the discount. Then $\$18.50 - \$5.40 = \$13.10$.
2. **\$10.40** Each sketchbook costs $\$8.00 * 0.85 = \6.80 . Two cost $\$13.60$, so $\$24.00 - \$13.60 = \$10.40$.

CHALLENGE

\$4.80

Accept equivalent forms, such as $5/4$ or $1 \frac{1}{4}$. For money answers, accept an equivalent decimal amount with or without a trailing zero.