

Number Quest

Solve with whole numbers, fractions, and decimals.

GRADE 6 • 6.NR.1

6.NR.1 "Solve relevant, mathematical problems involving operations with whole numbers, fractions, and decimal numbers."

NAME _____

DATE _____

CHOOSE THE RIGHT STEPS

For mixed operations, work inside parentheses first, then multiply or divide, then add or subtract. When adding or subtracting fractions, rename them with a common denominator. Line up decimal points carefully, and estimate to check whether your answer makes sense.

WORKED EXAMPLE

Find: $4\frac{2}{5} + 1\frac{3}{10} - \frac{3}{4}$

1. Rename $\frac{2}{5}$ as $\frac{4}{10}$: $4\frac{4}{10} + 1\frac{3}{10} - \frac{3}{4}$
2. Add the first two mixed numbers: $5\frac{7}{10} - \frac{3}{4}$
3. Use twentieths and subtract: $5\frac{14}{20} - \frac{15}{20} = 4\frac{19}{20}$

Answer: $4\frac{19}{20}$

PRACTICE 6 problems

1 $684 - 297 + 146$

ANSWER _____

2 $\frac{5}{6} + \frac{7}{12}$

ANSWER _____

3 $7\frac{3}{8} - 2\frac{5}{6}$

ANSWER _____

4 $12.6 - 4.78 + 0.95$

ANSWER _____

5 $36 \times \frac{7}{9}$

ANSWER _____

6 $(45 \div 5) + 6 \times 4$

ANSWER _____

APPLY IT Show your work

- 1** The game club has \$24.75 from snack sales. It spends \$8.60 on supplies and then earns \$6.35 from a raffle. How much money does the club have now?

WORK SPACE

ANSWER _____

- 2** A tablet update is $2\frac{1}{2}$ GB. By Monday, Kai downloads $\frac{3}{5}$ of the update. On Tuesday, Kai downloads another $\frac{3}{4}$ GB. How much of the update remains?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

The art club has $19\frac{1}{2}$ yards of fabric. It uses $3\frac{2}{5}$ yards for costumes and $4\frac{1}{10}$ yards for a display. The remaining fabric is cut into strips that are each $\frac{2}{3}$ yard long. How many complete strips can the club cut?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$684 - 297 + 146$	533
2	$5/6 + 7/12$	1 $5/12$
3	$7 \frac{3}{8} - 2 \frac{5}{6}$	4 $13/24$
4	$12.6 - 4.78 + 0.95$	8.77
5	$36 \times 7/9$	28
6	$(45 \div 5) + 6 \times 4$	33

PART 2 • APPLY IT

1. **\$22.50** Subtract the cost from the snack-sale money, then add the raffle money: $24.75 - 8.60 + 6.35 = 22.50$.
2. **1/4 GB** Find $3/5$ of $2 \frac{1}{2}$ GB, then add $3/4$ GB. Kai has downloaded $1 \frac{1}{2} + 3/4 = 2 \frac{1}{4}$ GB, so $1/4$ GB remains.

CHALLENGE

18 complete strips

Accept equivalent fraction forms and improper fractions where appropriate. For decimal money, accept \$22.5 or \$22.50.