

Operation Quest

Plan each step, then compute accurately.

GRADE 6 • MA.6.NSO.2.3

MA.6.NSO.2.3 "Solve multi-step real-world problems involving any of the four operations with positive multi-digit decimals or positive fractions, including mixed numbers."

NAME _____

DATE _____

BUILD A SOLUTION PATH

Read the situation and decide which operation happens first. Use the order of operations in numerical expressions, and keep decimal places or fraction units lined up as you calculate. Check whether your final answer makes sense for the situation.

WORKED EXAMPLE

A streaming service costs \$4.80 each month for 7 months, plus a \$0.35 fee. What is the total cost?

1. Find the monthly cost: $4.80 \times 7 = 33.60$.
2. Add the fee: $33.60 + 0.35 = 33.95$.

Answer: \$33.95

PRACTICE 6 problems

1 Find $(3.6 + 1.25) \times 2$.

ANSWER _____

2 Find $7 \frac{1}{2} - 2 \frac{3}{4} + \frac{1}{8}$.

ANSWER _____

3 Find $12.48 \div 3 + 0.6$.

ANSWER _____

4 Find $\frac{5}{6} \times 3 \frac{3}{5} + \frac{1}{4}$.

ANSWER _____

5 Find $9.5 - 1.2 \times 4$.

ANSWER _____

6 Find $4 \frac{1}{4} \div \frac{1}{2} + \frac{2}{3}$.

ANSWER _____

APPLY IT Show your work

- 1** Maya has \$24.60 saved for a game tournament. She buys 3 snack packs at \$4.25 each and a drink for \$2.85. How much money does Maya have left?

WORK SPACE

ANSWER _____

- 2** A robotics team has $11 \frac{1}{2}$ meters of wire and buys $\frac{3}{4}$ meter more. It uses $2 \frac{1}{4}$ meters of wire for each of 4 sensors. How many meters of wire are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

An art club has $14 \frac{2}{3}$ yards of ribbon. It uses $1 \frac{3}{4}$ yards for each of 3 banners. The club cuts the remaining ribbon into pieces that are each $\frac{2}{3}$ yard long. How many full pieces can the club cut, and how much ribbon will remain?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find $(3.6 + 1.25) \times 2$.	9.7
2	Find $7 \frac{1}{2} - 2 \frac{3}{4} + \frac{1}{8}$.	4 $\frac{7}{8}$
3	Find $12.48 \div 3 + 0.6$.	4.76
4	Find $\frac{5}{6} \times 3 \frac{3}{5} + \frac{1}{4}$.	3 $\frac{1}{4}$
5	Find $9.5 - 1.2 \times 4$.	4.7
6	Find $4 \frac{1}{4} \div \frac{1}{2} + \frac{2}{3}$.	9 $\frac{1}{6}$

PART 2 • APPLY IT

1. **\$9.00** Multiply 3×4.25 to find the snack cost, then subtract both purchases from 24.60. $24.60 - 12.75 - 2.85 = 9.00$.
2. **3 $\frac{1}{4}$ meters** Add the wire amounts, then subtract the wire used for 4 sensors. $11 \frac{1}{2} + \frac{3}{4} - (4 \times 2 \frac{1}{4}) = 3 \frac{1}{4}$.

CHALLENGE

14 full pieces, with $\frac{1}{12}$ yard remaining

Accept equivalent fraction forms, such as $\frac{55}{6}$ for problem 6. Accept \$9 or \$9.00 for the first word problem, and require both results for the challenge.