LESSON MAKER PRO

Multi-Step Number Mission

Solve, estimate, and check each answer.

GRADE 4 · 4.NR.2.5

4.NR.2.5 "Solve multi-step problems using addition, subtraction, multiplication, and division involving whole numbers. Use mental computation and estimation strategies to justify the reasonableness of solutions."

NAME _____ DATE _____

SOLVE AND CHECK

Solve one operation at a time. Use nearby numbers you can compute mentally to estimate, then check whether your exact answer is close to your estimate.

WORKED EXAMPLE

A shelf has 12 rows of 14 books. Then 5 books are loaned. How many books are still on the shelf?

1. 12 × 14 = 168.
2. 168 - 5 = 163.
3. Estimate: 12 × 15 - 5 = 175.
4. 163 is close to 175, so the answer is reasonable.

Answer: 163 books

PRACTICE 5 problems

1 Solve: 4 × 18 + 9. Is 80 a reasonable estimate? Explain.

ANSWER _____

2 Solve mentally: 96 / 3 + 17.

ANSWER _____

3 Solve: 125 - 4 × 19. Is 50 a reasonable estimate? Explain.

ANSWER _____

4 Solve: (72 + 36) / 4.

ANSWER _____

5 Solve mentally: 3 × (43 - 21).

ANSWER _____

APPLY IT Show your work

1 Maya has 3 packs of 28 stickers. She gives 17 stickers to friends. How many stickers does she have left? Explain why 70 is a reasonable estimate.

WORK SPACE

ANSWER _____

2 A comic club gets 6 boxes with 35 comics in each box. The club gives away 48 comics. How many comics are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A game room buys 8 packs of 24 tokens. It saves 32 tokens for prizes. The rest are shared equally among 4 stations. How many tokens go to each station? Explain why your answer is reasonable.

WORK SPACE AND ANSWER

ANSWER KEY

Multi-Step Number Mission

GRADE 4 · 4.NR.2.5

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Solve: 4 × 18 + 9. Is 80 a reasonable estimate? Explain.	**81; Yes, 81 is close to 80.**
2	Solve mentally: 96 / 3 + 17.	**49**
3	Solve: 125 - 4 × 19. Is 50 a reasonable estimate? Explain.	**49; Yes, 49 is close to 50.**
4	Solve: (72 + 36) / 4.	**27**
5	Solve mentally: 3 × (43 - 21).	**66**

PART 2 · APPLY IT

1. **67 stickers; 70 is reasonable because 67 is close to 70.** Multiply 3 × 28 to get 84, then subtract 17. The exact answer, 67, is close to 70.
2. **162 comics** Multiply 6 × 35 to get 210, then subtract 48. An estimate of 210 - 50 = 160 supports the answer.

CHALLENGE

40 tokens per station; 8 × 24 is about 200, and 32 is about 40. Then (200 - 40) / 4 = 40, which supports the answer.

Accept correct equations, mental strategies, and estimates that reasonably support the exact answer. For explanation items, accept any clear statement that compares the exact answer with a sensible estimate.