LESSON MAKER PRO

Plan, Solve, Check

Use a plan, solve in steps, and check your answer.

GRADE 4 · 4.MP

4.MP "Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration and expression. Seek help and apply feedback..."

NAME _____ DATE _____

MAKE A PLAN

Read the problem twice. Choose an operation, solve in steps, then check with the opposite operation or an estimate. If your check does not match, revise your plan or ask for feedback.

WORKED EXAMPLE

Six art kits hold 8 markers each. The markers are shared equally by 4 tables. How many markers does each table get?

1. Plan: multiply, then divide.
2. 6 × 8 = 48 markers.
3. 48 / 4 = 12 markers per table.

Answer: 12 markers per table. Check: 12 × 4 = 48.

PRACTICE 5 problems

1 Three bags hold 7 marbles each. Sam gives 5 marbles away. Plan, solve, and check. How many marbles remain?

ANSWER _____

2 Forty-five trading cards fill pages with 9 cards on each page. Plan, solve, and check. How many pages are filled?

ANSWER _____

3 A garden has 27 seedlings in 3 equal rows. Each row gets 5 more seedlings. Plan, solve, and check. How many seedlings are there now?

ANSWER _____

4 A player has 90 points and earns 30 points in each of 2 rounds. Plan, solve, and check. How many points does the player have now?

ANSWER _____

5 A theater has 91 seats in 7 equal rows. In each row, 3 seats are blocked. Plan, solve, and check. How many seats can be used?

ANSWER _____

APPLY IT Show your work

1 The robotics club has 7 boxes with 18 batteries in each box. The club uses 35 batteries. Write an equation, solve, and check. How many batteries are left?

WORK SPACE

ANSWER _____

2 A gaming club divides 96 points equally among 3 teams. Each team then earns 15 bonus points. Write an equation, solve, and check. How many points does each team have?

WORK SPACE

ANSWER _____

CHALLENGE One step up

At a school game, 9 rows hold 14 seats each. Seventeen seats are empty. Each sold ticket costs $2. How much ticket money is collected? Explain why you subtract before multiplying by 2.

WORK SPACE AND ANSWER

ANSWER KEY

Plan, Solve, Check

GRADE 4 · 4.MP

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Three bags hold 7 marbles each. Sam gives 5 marbles away. Plan, solve, and check. How many marbles remain?	**Plan: 3 × 7 - 5 = 16. 16 marbles. Check: 16 + 5 = 21.**
2	Forty-five trading cards fill pages with 9 cards on each page. Plan, solve, and check. How many pages are filled?	**Plan: 45 / 9 = 5. 5 pages. Check: 5 × 9 = 45.**
3	A garden has 27 seedlings in 3 equal rows. Each row gets 5 more seedlings. Plan, solve, and check. How many seedlings are there now?	**Plan: 27 + 3 × 5 = 42. 42 seedlings. Check: 27 + 15 = 42.**
4	A player has 90 points and earns 30 points in each of 2 rounds. Plan, solve, and check. How many points does the player have now?	**Plan: 90 + 2 × 30 = 150. 150 points. Check: 150 - 60 = 90.**
5	A theater has 91 seats in 7 equal rows. In each row, 3 seats are blocked. Plan, solve, and check. How many seats can be used?	**Plan: 91 / 7 = 13, then 13 - 3 = 10. 70 seats. Check: 7 × 10 = 70.**

PART 2 · APPLY IT

1. **91 batteries.** Multiply 7 × 18 to find 126 batteries. Subtract 35 to get 91, then add 35 back to check.
2. **47 points.** Divide 96 by 3 to get 32 points per team. Add 15 bonus points to get 47.

CHALLENGE

9 × 14 = 126; 126 - 17 = 109; 109 × 2 = $218. Subtract the 17 empty seats first because only sold tickets bring in money.

Accept correct equations, words, or organized work that shows a sensible plan and a valid check. Accept equivalent checks, including repeated addition or subtraction.