LESSON MAKER PRO

Plan, Solve, Check

Use a clear strategy, then test your answer.

GRADE 6 · 6.MP

6.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 _____

A PROBLEM-SOLVING PLAN

Read to find what you need to know. Choose an operation, solve in steps, and check whether your answer makes sense using an estimate or the inverse operation.

WORKED EXAMPLE

A library puts 22 new bookmarks equally into 2 display baskets. How many bookmarks go in each basket?

1. Find the total and the number of equal groups.
2. Divide: 22 / 2 = 11.
3. Check: 11 + 11 = 22.

Answer: 11 bookmarks in each basket

PRACTICE 5 problems

1 A game club packs 28 cards, with 4 cards in each envelope. How many envelopes are needed? Show a plan, solve, and check.

ANSWER _____

2 A bus has 45 seats. If 17 seats are filled, how many seats are empty? Show a plan, solve, and check.

ANSWER _____

3 At a school event, 3/4 of 20 volunteer badges are handed out. How many badges are handed out? Show a plan, solve, and check.

ANSWER _____

4 Noah has $36. He buys 5 comic books that cost $7 each. How much money does he have left? Show a plan, solve, and check.

ANSWER _____

5 A science team shares 1.5 liters of water equally among 6 sample bottles. How much water goes in each bottle? Show a plan, solve, and check.

ANSWER _____

APPLY IT Show your work

1 The student council has $54 for a spirit-day booth. A banner costs $14, and each bracelet costs $4. How many bracelets can the council buy after buying the banner? Show a plan and check your answer.

WORK SPACE

ANSWER _____

2 A gaming tournament has 96 players. Teams have 6 players each. Then 4 teams leave before the tournament starts. How many players are still in the tournament? Show a plan and check your answer.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A snack booth has 75 tickets. Fruit cups cost 7 tickets each, and drinks cost 4 tickets each. The booth gives away 9 fruit cups first. What is the greatest number of drinks it can give away with the tickets left? Explain how you checked your answer.

WORK SPACE AND ANSWER

ANSWER KEY

Plan, Solve, Check

GRADE 6 · 6.MP

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A game club packs 28 cards, with 4 cards in each envelope. How many envelopes are needed? Show a plan, solve, and check.	**7 envelopes**
2	A bus has 45 seats. If 17 seats are filled, how many seats are empty? Show a plan, solve, and check.	**28 seats**
3	At a school event, 3/4 of 20 volunteer badges are handed out. How many badges are handed out? Show a plan, solve, and check.	**15 badges**
4	Noah has $36. He buys 5 comic books that cost $7 each. How much money does he have left? Show a plan, solve, and check.	**$1**
5	A science team shares 1.5 liters of water equally among 6 sample bottles. How much water goes in each bottle? Show a plan, solve, and check.	**0.25 liter per bottle**

PART 2 · APPLY IT

1. **10 bracelets** Subtract the banner cost: 54 - 14 = 40. Then divide 40 by 4 to get 10 bracelets.
2. **72 players** First find 96 / 6 = 16 teams. After 4 teams leave, 12 teams remain, and 12 x 6 = 72 players.

CHALLENGE

3 drinks.

Accept correct equations, organized plans, and checks that use an inverse operation or an estimate. Accept 1/4 liter as equivalent to 0.25 liter.