

Solve It Smart

*Plan, solve, check, and explain.***GRADE 3 • TEKS 3.1.B**

3.1.B "use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;"

NAME _____

DATE _____

PRACTICE: PLAN, SOLVE, CHECK

Read carefully to find what you know and what you need to find. Choose an operation, solve, then check your answer and tell why it makes sense.

WORKED EXAMPLE

Noah has 14 stickers. He gets 6 more stickers. How many stickers does he have now?

1. Know: 14 stickers and 6 more.
2. Plan: add $14 + 6$.
3. Solve: $14 + 6 = 20$.
4. Check: $20 - 6 = 14$.

Answer: 20 stickers**PRACTICE** 5 problems

- 1** A library has 23 new books. It gets 15 more books. How many new books does it have? Plan, solve, check, and tell why your answer makes sense.

ANSWER _____

- 2** Kai has 42 trading cards. He gives 17 cards to his cousin. How many cards are left? Plan, solve, check, and tell why your answer makes sense.

ANSWER _____

- 3** Four bags each hold 8 apples. How many apples are in all? Plan, solve, check, and tell why your answer makes sense.

ANSWER _____

- 4** A gardener puts 35 plants into 5 equal rows. How many plants are in each row? Plan, solve, check, and tell why your answer makes sense.

ANSWER _____

- 5** Priya has \$50. She buys a game for \$12 and a snack for \$9. How much money is left? Plan, solve, check, and tell why your answer makes sense.

ANSWER _____

APPLY IT Show your work

- 1** Jalen earns 7 stars on each of 5 game levels. Then he earns 8 bonus stars. How many stars does he earn altogether? Write a plan, solve, check, and explain why your answer is reasonable.

WORK SPACE

ANSWER _____

- 2** The art club has 63 beads. Students make 7 equal bracelets. How many beads go on each bracelet? Write a plan, solve, check, and explain why your answer is reasonable.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A bake sale has 8 trays with 7 muffins on each tray. Students eat 16 muffins. The rest are shared equally among 4 tables. How many muffins does each table get? Show your plan, solve, check, and explain why your answer makes sense.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A library has 23 new books. It gets 15 more books. How many new books does it have? Plan, solve, check, and tell why your answer makes sense.	38 books; add $23 + 15$. Check: $38 - 15 = 23$.
2	Kai has 42 trading cards. He gives 17 cards to his cousin. How many cards are left? Plan, solve, check, and tell why your answer makes sense.	25 cards; subtract $42 - 17$. Check: $25 + 17 = 42$.
3	Four bags each hold 8 apples. How many apples are in all? Plan, solve, check, and tell why your answer makes sense.	32 apples; multiply 4×8. Check: $32 \div 4 = 8$.
4	A gardener puts 35 plants into 5 equal rows. How many plants are in each row? Plan, solve, check, and tell why your answer makes sense.	7 plants in each row; divide $35 \div 5$. Check: $5 \times 7 = 35$.
5	Priya has \$50. She buys a game for \$12 and a snack for \$9. How much money is left? Plan, solve, check, and tell why your answer makes sense.	\$29; subtract 12 and 9 from 50. Check: $29 + 12 + 9 = 50$.

PART 2 • APPLY IT

- 43 stars** Multiply $5 \times 7 = 35$, then add 8. Check: $35 + 8 = 43$, which is more than 35.
- 9 beads on each bracelet** Divide $63 \div 7 = 9$. Check: $7 \times 9 = 63$, so all beads are used equally.

CHALLENGE

10 muffins per table; $8 \times 7 = 56$, $56 - 16 = 40$, and $40 \div 4 = 10$. Check: $4 \times 10 + 16 = 56$.

Accept correct equations, words, or labeled models for the plan and check. Accept reasonable explanations that compare the answer to the starting amount or use an inverse operation.