

Solve It Smart

Plan, solve, and check each situation.

GRADE 4 • 4.MP.1

4.MP.1 "Make sense of problems and persevere in solving them."

NAME _____

DATE _____

A PROBLEM-SOLVING PLAN

Read the problem carefully and decide what you need to find. Choose an operation or more than one operation, solve step by step, and check whether your answer makes sense in the situation.

WORKED EXAMPLE

The art club has 84 beads. It puts the beads into 7 equal bags. How many beads are in each bag?

1. Choose division because the beads are shared equally.
2. Compute $84 \div 7 = 12$.
3. Check: $12 \times 7 = 84$.

Answer: 12 beads are in each bag.

PRACTICE 6 problems

- 1** A bakery puts 36 muffins into 4 equal trays for a school event. How many muffins are on each tray? Write an equation and check your answer.

ANSWER _____

- 2** A class brings 4 packs of 6 trading cards and 11 single cards for a collection. How many trading cards does the class have altogether? Show your plan and check.

ANSWER _____

- 3** Jordan plans to read 135 pages this week. Jordan reads 28 pages on Monday and 31 pages on Tuesday. How many pages are left to read? Show your steps and check.

ANSWER _____

- 4** The art room has 5 boxes with 16 crayons in each box. There are also 9 loose crayons. How many crayons are there altogether? Write an equation and check.

ANSWER _____

- 5** At a snack table, 72 apple slices are placed equally into 8 bowls. How many apple slices are in each bowl? Show a way to check.

ANSWER _____

- 6** Kai has 93 game tokens. Kai spends 26 tokens at a prize booth and then earns 15 more tokens. How many tokens does Kai have now? Solve in order and check.

ANSWER _____

APPLY IT Show your work

- 1** A robotics club orders 6 kits with 18 gear pieces in each kit. A parent brings 17 extra gear pieces. Club members put all the gear pieces equally into 5 supply bins. How many gear pieces go in each bin? Show your plan and check.

WORK SPACE

ANSWER _____

- 2** Lena has a \$70 gift card for a book fair. She buys 3 comic books that cost \$8 each and one game guide that costs \$19. How much money is left on the gift card? Show your plan and check.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

The library has 152 new bookmarks. It gives 18 bookmarks to each of 6 classrooms. Then it shares the remaining bookmarks equally among 4 reading groups. How many bookmarks does each reading group get? Explain why you subtract before you divide.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A bakery puts 36 muffins into 4 equal trays for a school event. How many muffins are on each tray? Write an equation and check your answer.	9 muffins are on each tray.
2	A class brings 4 packs of 6 trading cards and 11 single cards for a collection. How many trading cards does the class have altogether? Show your plan and check.	35 trading cards altogether.
3	Jordan plans to read 135 pages this week. Jordan reads 28 pages on Monday and 31 pages on Tuesday. How many pages are left to read? Show your steps and check.	76 pages are left to read.
4	The art room has 5 boxes with 16 crayons in each box. There are also 9 loose crayons. How many crayons are there altogether? Write an equation and check.	89 crayons altogether.
5	At a snack table, 72 apple slices are placed equally into 8 bowls. How many apple slices are in each bowl? Show a way to check.	9 apple slices are in each bowl.
6	Kai has 93 game tokens. Kai spends 26 tokens at a prize booth and then earns 15 more tokens. How many tokens does Kai have now? Solve in order and check.	82 game tokens.

PART 2 • APPLY IT

- 25 gear pieces go in each bin.** Multiply 6×18 to get 108 pieces, then add 17 to get 125 pieces. Divide 125 by 5 to get 25, and check with $25 \times 5 = 125$.
- \$27 is left on the gift card.** Multiply 3×8 to get \$24, then add \$19 to get \$43 spent. Subtract \$43 from \$70 to get \$27.

CHALLENGE

Each reading group gets 11 bookmarks. First find the 108 bookmarks given to classrooms, then subtract from 152 to find 44 remaining bookmarks. Divide 44 by 4 to get 11.

Accept equivalent equations and clear written checks that match each situation. For the challenge, accept explanations that show the classroom bookmarks must be removed before the remaining bookmarks are shared.