

Plan, Solve, Check

Use a strategy, find the answer, and decide if it makes sense.

GRADE 5 • TEKS 5.1.B

5.1.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 _____

PART 1: PLAN IT

For every problem, identify what you know and what you need to find. Choose a strategy, solve, then check with a related operation or estimate. State why your answer is reasonable.

WORKED EXAMPLE

The robotics club has 18 badges to share equally among 3 teams. How many badges does each team get?

1. Plan: Divide because the badges are shared equally.
2. Solve: $18 \div 3 = 6$.
3. Check: $6 \times 3 = 18$.

Answer: 6 badges per team. The check matches the total.

PRACTICE 5 problems

- 1** A coach has 28 water bottles and puts 4 bottles in each crate. How many crates are needed?

ANSWER _____

- 2** Forty trading cards are shared equally by 5 players. How many cards does each player get?

ANSWER _____

- 3** A hiker walks $\frac{1}{4}$ mile on each of 8 laps. How far does the hiker walk?

ANSWER _____

- 4** At a craft sale, pins cost \$2.50 each. Jada buys 4 pins. How much does she spend?

ANSWER _____

- 5** A reader is finishing a 52-page comic and has read 27 pages. How many pages are left?

ANSWER _____

APPLY IT Show your work

- 1** Part 2: Apply. The game club has \$45 for game-design card packs. Each pack costs \$7, and the club buys 5 packs. How much money remains?

WORK SPACE

ANSWER _____

- 2** A student has 72 beads. They make 8 friendship bracelets using 7 beads for each bracelet. How many beads are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Part 3: Challenge. Kai has saved $\frac{1}{4}$ of \$80 and earns \$9 for a chore. A game costs \$24. Can Kai buy the game? Explain how you know and give the change.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A coach has 28 water bottles and puts 4 bottles in each crate. How many crates are needed?	7 crates; $7 \times 4 = 28$.
2	Forty trading cards are shared equally by 5 players. How many cards does each player get?	8 cards; $8 \times 5 = 40$.
3	A hiker walks $\frac{1}{4}$ mile on each of 8 laps. How far does the hiker walk?	2 miles; $2 \div 8 = \frac{1}{4}$ mile per lap.
4	At a craft sale, pins cost \$2.50 each. Jada buys 4 pins. How much does she spend?	\$10; $4 \times \\$2.50 = \\10.
5	A reader is finishing a 52-page comic and has read 27 pages. How many pages are left?	25 pages; $27 + 25 = 52$.

PART 2 • APPLY IT

- \$10 remains.** Multiply $5 \times 7 = 35$, then subtract $45 - 35 = 10$. Adding \$35 and \$10 checks the budget.
- 16 beads are left.** Multiply $8 \times 7 = 56$ beads used, then subtract $72 - 56 = 16$. Used beads plus leftover beads equals 72.

CHALLENGE

Yes. $\frac{1}{4}$ of \$80 is \$20, and $\$20 + \$9 = \$29$. Kai can buy the game and has \$5 left.

Accept any correct strategy with a valid check or reasonable estimate. Require correct units and an explanation that connects the answer to the situation.