

Solve It Smart

Plan, solve, and check each situation.

GRADE 6 • 6.MP.1

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

NAME _____

DATE _____

PLAN, SOLVE, CHECK

Read to find the question and the facts you need. Choose an operation, solve in steps, then check that your answer makes sense in the situation.

WORKED EXAMPLE

A music club buys 6 boxes of 8 guitar picks. It gives 9 picks to a beginner group. How many picks remain?

1. Find the total: $6 \times 8 = 48$.
2. Subtract the picks given away: $48 - 9 = 39$.
3. Check: $39 + 9 = 48$.

Answer: 39 guitar picks

PRACTICE 5 problems

- 1** A gaming club makes 5 prize bags with 7 pins in each bag. How many pins are needed?

ANSWER _____

- 2** A student puts 42 photos equally into 3 online albums. How many photos go in each album?

ANSWER _____

- 3** A dance rehearsal lasts 57 minutes. Warm-up takes 17 minutes. The rest is shared equally among 4 routines. How many minutes does each routine get?

ANSWER _____

- 4** Nora has \$31 for school supplies. She buys 4 notebooks for \$3 each. How much money is left?

ANSWER _____

- 5** A bake sale makes 3 trays with 12 cookies on each tray. How many cookies are made?

ANSWER _____

APPLY IT Show your work

- 1** A new game costs \$52. Four friends each give Jada \$7 toward the game. How much does Jada need to pay?

WORK SPACE

ANSWER _____

- 2** The robotics club has 75 name badges. After 15 members take one badge each, the club packs the rest in groups of 3. How many packs can it make?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A ticket booth has 125 tickets. It gives 21 tickets to each of 5 winners. Can it give 22 tickets to one more winner? Explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A gaming club makes 5 prize bags with 7 pins in each bag. How many pins are needed?	35 pins
2	A student puts 42 photos equally into 3 online albums. How many photos go in each album?	14 photos
3	A dance rehearsal lasts 57 minutes. Warm-up takes 17 minutes. The rest is shared equally among 4 routines. How many minutes does each routine get?	10 minutes
4	Nora has \$31 for school supplies. She buys 4 notebooks for \$3 each. How much money is left?	\$19
5	A bake sale makes 3 trays with 12 cookies on each tray. How many cookies are made?	36 cookies

PART 2 • APPLY IT

1. **\$24** The friends give $4 \times 7 = \$28$. Subtract: $52 - 28 = \$24$.
2. **20 packs** First find the badges left: $75 - 15 = 60$. Then divide: $60 \div 3 = 20$.

CHALLENGE

No. The booth gives away $5 \times 21 = 105$ tickets, leaving 20 tickets. It needs 2 more tickets.

Accept correct equations and a reasonable check. For the challenge, students must state that 20 tickets remain and that 22 tickets are not available.