LESSON MAKER PRO

Plan, Solve, Check

Use pictures, math, and reasons to solve real problems.

GRADE 4 · TEKS 4.1

4.1 "Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: apply mathematics to problems arising in everyday life, society, and the workplace..."

NAME _____ DATE _____

A SMART PROBLEM PLAN

Read the facts in the words and in any figure. Make a plan, solve, then check if your answer makes sense. Show your thinking with an equation, a drawing, or clear words.

WORKED EXAMPLE

The clock shows when art club starts. Art club lasts 35 minutes. What time does it end?

1. Plan: Add 35 minutes to the start time.
2. 15 minutes after 2:15 is 2:30.
3. Add 20 more minutes: 2:50.
4. Check: 15 + 35 = 50 minutes past 2.

Answer: 2:50

PRACTICE 4 problems

1 Maya puts 8 stickers in each of 7 prize bags. Write an equation and find how many stickers she uses.

ANSWER _____

2 A game costs $84. Sam has $100. How much money will be left? Estimate to check that your answer is reasonable.

ANSWER _____

3 A bus has 36 seats in 4 equal rows. How many seats are in each row? Explain which operation you used.

ANSWER _____

4 The art room has 3 boxes of 24 markers. All the markers are shared equally among 8 tables. How many markers does each table get? Write an equation that checks your answer.

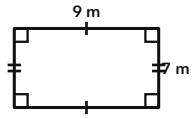
ANSWER _____

APPLY IT Show your work

1 The bar graph shows bags collected by recycling teams. Which two teams collected 31 bags altogether? Tell how you checked.

ANSWER _____

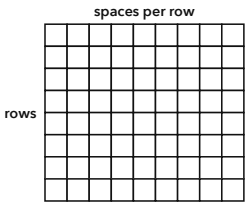
2 The rectangle is a puppy-play area. How much fencing is needed to go all the way around it? Explain your plan.



ANSWER _____

CHALLENGE One step up

The array shows spaces on a display board. Seventeen spaces are reserved for photos. How many spaces are open? Explain why your answer is reasonable.



WORK SPACE AND ANSWER

ANSWER KEY

Plan, Solve, Check

GRADE 4 · TEKS 4.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Maya puts 8 stickers in each of 7 prize bags. Write an equation and find how many stickers she uses.	**7 × 8 = 56; Maya uses 56 stickers.**
2	A game costs $84. Sam has $100. How much money will be left? Estimate to check that your answer is reasonable.	**$16; 100 - 84 = 16. An estimate is 100 - 80 = 20, so $16 is reasonable.**
3	A bus has 36 seats in 4 equal rows. How many seats are in each row? Explain which operation you used.	**9 seats; use division because 36 seats are shared into 4 equal rows: 36 ÷ 4 = 9.**
4	The art room has 3 boxes of 24 markers. All the markers are shared equally among 8 tables. How many markers does each table get? Write an equation that checks your answer.	**9 markers; 3 × 24 = 72, 72 ÷ 8 = 9, and 8 × 9 = 72.**

PART 2 · APPLY IT

1. **Comets and Rockets; 13 + 18 = 31.** Read the two bar values and add them. Check that no other pair of team totals is 31.
2. **32 m; add all four sides: 9 + 7 + 9 + 7 = 32.** Find the perimeter by adding the lengths of all four sides. Opposite sides of the rectangle are equal.

CHALLENGE

55 spaces; 8 × 9 = 72 total spaces, and 72 - 17 = 55. Since 17 is less than 72, 55 is reasonable.

Accept correct equations, clear words, or organized drawings that show a reasonable plan and check. Accept equivalent multiplication equations for the array and sticker problems.