

Math Model Mission

Use equations to represent real situations.

GRADE 6 • 6.MP.4

6.MP.4 "Model with mathematics."

NAME _____

DATE _____

BUILD A MODEL

Choose an equation that matches the quantities and the question. Solve it, then check that your answer makes sense in the situation.

WORKED EXAMPLE

Eighteen stickers are shared equally among 3 teams. How many stickers does each team get?

1. Let x = stickers per team.
2. Write $3x = 18$.
3. Divide by 3: $x = 6$.
4. Check: $3 * 6 = 18$.

Answer: 6 stickers per team

PRACTICE 5 problems

- 1** Twenty-four game cards are packed equally into 4 packs. Model, solve, and check.

ANSWER _____

- 2** Malik runs 35 laps equally over 5 days. Model, solve, and check.

ANSWER _____

- 3** Ava earns \$48 for 6 equal chores. Model, solve, and check.

ANSWER _____

- 4** Fifty-six photos fill 7 scrapbook pages equally. Model, solve, and check.

ANSWER _____

- 5** A player earns 45 points equally in 9 rounds. Model, solve, and check.

ANSWER _____

APPLY IT Show your work

- 1** The robotics club has \$96. It buys 7 kits for \$12 each. How much money is left? Show an equation and check.

WORK SPACE

ANSWER _____

- 2** Jada has \$75 for a movie night. A ticket costs \$14 and a ride costs \$8. How much can she spend on snacks? Show an equation and check.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

At a school game, 16 tickets were sold for \$94. Adult tickets cost \$7 and student tickets cost \$5. How many of each ticket were sold? Write equations and explain how you checked.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Twenty-four game cards are packed equally into 4 packs. Model, solve, and check.	6 cards per pack; $4 \times 6 = 24$
2	Malik runs 35 laps equally over 5 days. Model, solve, and check.	7 laps per day; $5 \times 7 = 35$
3	Ava earns \$48 for 6 equal chores. Model, solve, and check.	\$8 per chore; $6 \times 8 = 48$
4	Fifty-six photos fill 7 scrapbook pages equally. Model, solve, and check.	8 photos per page; $7 \times 8 = 56$
5	A player earns 45 points equally in 9 rounds. Model, solve, and check.	5 points per round; $9 \times 5 = 45$

PART 2 • APPLY IT

- \$12 is left.** Model with $96 - 7(12) = x$. Since $7(12) = 84$ and $96 - 84 = 12$, \$12 remains.
- \$53 can be spent on snacks.** Model with $75 - 14 - 8 = x$. Since $75 - 22 = 53$, Jada can spend \$53.

CHALLENGE

7 adult tickets and 9 student tickets. Check: $7 + 9 = 16$ and $7(7) + 5(9) = 94$.

Accept equivalent equations and clear tables or organized guesses that match the situation. Students should include units and a valid check.