

Multiply, Split, Solve

Use equal groups and arrays to solve problems.

GRADE 3 • TEKS 3.4.K

3.4.K "solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts."

NAME _____

DATE _____

EQUAL GROUPS WORK

Use multiplication to find a total when groups are equal. Use division to split a total into equal groups or to find how many are in each group.

WORKED EXAMPLE

An array has 4 rows of 8 stars. How many stars are there?

1. There are 4 equal rows with 8 stars in each row.
2. Multiply: $4 \times 8 = 32$.
3. The array has 32 stars.

Answer: 32 stars

PRACTICE 6 problems

1 $9 \times 3 = \underline{\quad}$

ANSWER _____

2 $63 \div 9 = \underline{\quad}$

ANSWER _____

- 3** A sticker sheet has 7 rows with 5 stickers in each row. How many stickers are on the sheet?

ANSWER _____

- 4** A tile array has 54 tiles in 6 equal rows. How many tiles are in each row?

ANSWER _____

- 5** Mia has 3 bags with 9 marbles in each bag. She gives 7 marbles away. How many marbles does she have now?

ANSWER _____

- 6** There are 72 cards in 9 equal piles. Then 2 cards are added to each pile. How many cards are in each pile now?

ANSWER _____

APPLY IT Show your work

- 1** At a game club, 6 tables have 9 cards on each table. The cards are shared equally among 3 teams. How many cards does each team get?

WORK SPACE

ANSWER _____

- 2** A soccer coach puts 7 cones in each of 6 lanes. She shares all the cones equally among 3 practice teams. How many cones does each team get?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Jordan says that $54 \div 6 = 7$ because $6 \times 7 = 42$. Explain why Jordan is wrong. Then find $54 \div 6$.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$9 \times 3 = \underline{\quad}$	27
2	$63 \div 9 = \underline{\quad}$	7
3	A sticker sheet has 7 rows with 5 stickers in each row. How many stickers are on the sheet?	35 stickers
4	A tile array has 54 tiles in 6 equal rows. How many tiles are in each row?	9 tiles
5	Mia has 3 bags with 9 marbles in each bag. She gives 7 marbles away. How many marbles does she have now?	20 marbles
6	There are 72 cards in 9 equal piles. Then 2 cards are added to each pile. How many cards are in each pile now?	10 cards

PART 2 • APPLY IT

1. **18 cards** Find the total cards: $6 \times 9 = 54$. Share them among 3 teams: $54 \div 3 = 18$.
2. **14 cones** Find the total cones: $7 \times 6 = 42$. Share them among 3 teams: $42 \div 3 = 14$.

CHALLENGE

Jordan is wrong because 6×7 is 42, not 54. Since $6 \times 9 = 54$, $54 \div 6 = 9$.

Accept correct multiplication or division equations, arrays, equal-group sketches, or recalled facts. For the challenge, accept any clear explanation that shows $6 \times 9 = 54$ and gives 9.