

Math Story Maps

Use equations, tables, and strip diagrams to show what you know.

GRADE 4 • TEKS 4.1.E

4.1.E "create and use representations to organize, record, and communicate mathematical ideas;"

NAME _____

DATE _____

SHOW THE MATH

A representation, such as an equation, a table, or a strip diagram, organizes the numbers in a story. Use multiplication for equal groups and division for equal sharing.

WORKED EXAMPLE

A music club has 7 groups. Each group earns 6 points. Write an equation and find the total points.

1. There are 7 equal groups of 6 points.
2. Write the equation: $7 \times 6 = \underline{\quad}$.
3. Multiply: $7 \times 6 = 42$.

Answer: $7 \times 6 = 42$; 42 points

PRACTICE 6 problems

- 1** A game shop puts 8 cards in each of 5 prize packs. Write a multiplication equation and find the total number of cards.

ANSWER _____

- 2** A bracelet maker shares 45 beads equally among 9 bracelets. Write a division equation and find the number of beads on each bracelet.

ANSWER _____

- 3** A cafeteria sets up 3 rows with 12 chairs in each row. Write a multiplication equation and find the total number of chairs.

ANSWER _____

- 4** A reader plans to finish 64 pages over 8 equal days. Write a division equation and find the number of pages to read each day.

ANSWER _____

- 5** An art teacher has 4 boxes with 15 colored pencils in each box. Write a multiplication equation and find the total number of colored pencils.

ANSWER _____

- 6** A player sorts 72 trading cards into 8 equal stacks. Write a division equation and find the number of cards in each stack.

ANSWER _____

APPLY IT Show your work

- 1** Each prize bag gets 5 markers. Use the table to find how many markers are needed for all the prize bags. Write an equation that shows your work.

PRIZE BAGS EARNED

Class	Prize bags
Comets	14
Rockets	11
Stars	9

ANSWER _____

- 2** The coding club will divide the points shown in the strip diagram equally among four teams. How many points will each team get? Write a division equation.

Points

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 84 points

ANSWER _____

CHALLENGE One step up

The school store has 9 shelves with 14 notebooks on each shelf. It sells 36 notebooks. Write two equations, then explain in one sentence how your equations show how many notebooks are left.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A game shop puts 8 cards in each of 5 prize packs. Write a multiplication equation and find the total number of cards.	$8 \times 5 = 40$; 40 cards
2	A bracelet maker shares 45 beads equally among 9 bracelets. Write a division equation and find the number of beads on each bracelet.	$45 / 9 = 5$; 5 beads
3	A cafeteria sets up 3 rows with 12 chairs in each row. Write a multiplication equation and find the total number of chairs.	$3 \times 12 = 36$; 36 chairs
4	A reader plans to finish 64 pages over 8 equal days. Write a division equation and find the number of pages to read each day.	$64 / 8 = 8$; 8 pages
5	An art teacher has 4 boxes with 15 colored pencils in each box. Write a multiplication equation and find the total number of colored pencils.	$4 \times 15 = 60$; 60 colored pencils
6	A player sorts 72 trading cards into 8 equal stacks. Write a division equation and find the number of cards in each stack.	$72 / 8 = 9$; 9 cards

PART 2 • APPLY IT

1. $(14 + 11 + 9) \times 5 = 170$; 170 markers Add the prize bags to get 34 bags. Multiply 34 by 5 markers per bag.
2. $84 / 4 = 21$; 21 points The strip has four equal parts and a total of 84 points. Divide 84 by 4.

CHALLENGE

$9 \times 14 = 126$. $126 - 36 = 90$. The first equation finds all the notebooks, and the second equation finds the 90 notebooks left.

Accept equivalent multiplication equations with the factors reversed. For the first word problem, accept a correct equation that adds the three class totals before multiplying by 5.