

# Times As Many

Turn comparison words into multiplication equations.

GRADE 4 • NY-4.OA.1

**NY-4.OA.1** "Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations."

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## COMPARE WITH MULTIPLICATION

In a comparison, the words "times as many as" tell how many equal groups of the smaller amount make the larger amount. Put the multiplier first: multiplier  $\times$  smaller amount = larger amount. Read the equation to check that the larger amount is the product.

## WORKED EXAMPLE

A shelf has 7 board games. The game club has 5 times as many board games as the shelf. Write an equation and find how many board games the club has.

1. The multiplier is 5.
2. Write  $5 \times 7 = \underline{\quad}$ .
3. Multiply  $5 \times 7$  to get 35.

**Answer:  $5 \times 7 = 35$ . The club has 35 board games.**

## PRACTICE 6 problems

- 1** There are 6 yellow balloons. There are 3 times as many green balloons. Write a multiplication equation to compare the green balloons to the yellow balloons.

**ANSWER** \_\_\_\_\_

- 2** There are 8 blue flags. There are 4 times as many red flags. Write a multiplication equation to compare the red flags to the blue flags.

**ANSWER** \_\_\_\_\_

- 3** A rabbit eats 9 carrot pieces. A goat eats 2 times as many carrot pieces. Write an equation and find how many carrot pieces the goat eats.

**ANSWER** \_\_\_\_\_

- 4** Complete both parts: 24 is \_\_\_\_ times as many as 8. \_\_\_\_  $\times$  8 = 24.

**ANSWER** \_\_\_\_\_

- 5** Read the equation  $6 \times 11 = 66$ . Complete the comparison: 66 is \_\_\_\_ times as many as 11.

**ANSWER** \_\_\_\_\_

- 6** Mia has 12 trading cards. Leo has 4 times as many trading cards as Mia. Write an equation and find how many trading cards Leo has.

**ANSWER** \_\_\_\_\_

## APPLY IT Show your work

- 1** At an arcade, Sam earns 14 tickets. Ava earns 3 times as many tickets as Sam. Write a multiplication equation and find how many tickets Ava earns.

WORK SPACE

**ANSWER** \_\_\_\_\_

- 2** Maya has 16 beads for a friendship bracelet. Her cousin has 4 times as many beads as Maya. Write a multiplication equation and find how many beads Maya's cousin has.

WORK SPACE

**ANSWER** \_\_\_\_\_

## CHALLENGE One step up

Rina has 9 game cards. Omar has 4 times as many game cards as Rina. Eli has 2 times as many game cards as Omar. How many game cards does Eli have? Write one equation and explain your reasoning.

WORK SPACE AND ANSWER

## PART 1 • PRACTICE

| # | PROBLEM                                                                                                                                                      | ANSWER                                              |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 1 | There are 6 yellow balloons. There are 3 times as many green balloons. Write a multiplication equation to compare the green balloons to the yellow balloons. | $3 \times 6 = 18$                                   |
| 2 | There are 8 blue flags. There are 4 times as many red flags. Write a multiplication equation to compare the red flags to the blue flags.                     | $4 \times 8 = 32$                                   |
| 3 | A rabbit eats 9 carrot pieces. A goat eats 2 times as many carrot pieces. Write an equation and find how many carrot pieces the goat eats.                   | $2 \times 9 = 18$ . The goat eats 18 carrot pieces. |
| 4 | Complete both parts: 24 is ___ times as many as 8. $\_\_ \times 8 = 24$ .                                                                                    | <b>3; <math>3 \times 8 = 24</math></b>              |
| 5 | Read the equation $6 \times 11 = 66$ . Complete the comparison: 66 is ___ times as many as 11.                                                               | <b>6</b>                                            |
| 6 | Mia has 12 trading cards. Leo has 4 times as many trading cards as Mia. Write an equation and find how many trading cards Leo has.                           | $4 \times 12 = 48$ . Leo has 48 trading cards.      |

## PART 2 • APPLY IT

- $3 \times 14 = 42$ . Ava earns 42 tickets.** Use 3 as the multiplier because Ava earns 3 times Sam's amount. Multiply  $3 \times 14$  to find Ava's tickets.
- $4 \times 16 = 64$ . Maya's cousin has 64 beads.** Use 4 groups of 16 beads. Multiply  $4 \times 16$  to find the cousin's amount.

## CHALLENGE

**$2 \times 4 \times 9 = 72$ . Omar has 4 groups of 9 cards, and Eli has 2 groups of Omar's 36 cards.**

Accept equivalent multiplication equations with the factors reversed when the product is correct. For comparison statements, students should identify the multiplier as the number of times as many.