

Step In Solving Multiplication and Division Problems with Strip Diagrams

Read each of these problems.

Nicole has 9 playing cards.
Awan has 4 times as many cards.
How many cards does Awan have?

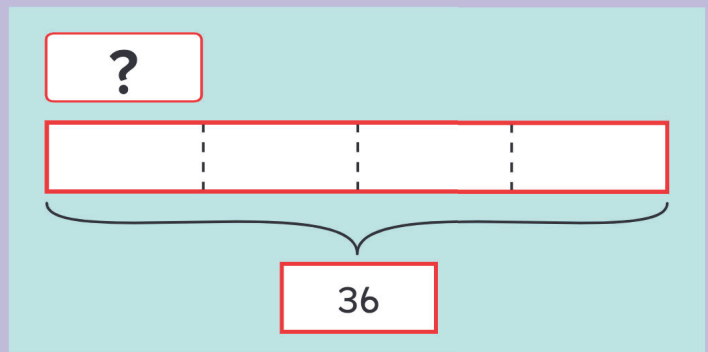
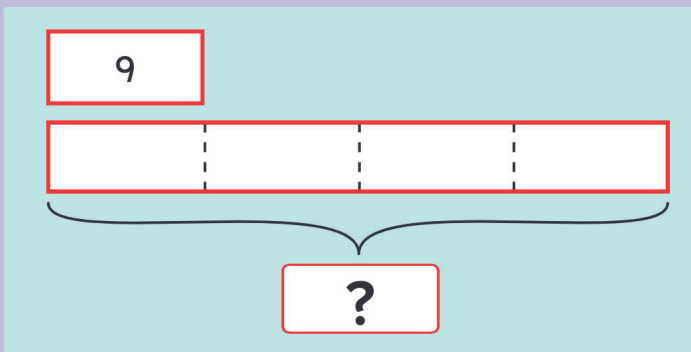
Hugo has 36 playing cards. He has
4 times as many cards as Akeema.
How many cards does Akeema have?

Describe how each of these problems is different.

The problem on the left involves multiplication.
The problem on the right involves division.



Strip diagrams could be used to model each of these problems.
Match each strip diagram to one problem.



How did you decide which strip matched each problem?

Step Up

1. Loop multiplication or division to show how you would solve each problem.

a. Toby has \$45 in savings.
He has twice as much money as
his friend. How much does his
friend have in savings?

Multiplication

Division

b. The hospital is 5 miles away. The
distance to the airport is 6 times as
far. How far away is the airport?

Multiplication

Division

2. Draw a strip diagram to help solve each problem. Then write the answer.

- a. Fatima's cat weighs 3 kilograms. Her dog weighs 6 times as much. How much does the dog weigh?

kg

- b. Jude is 27 years old. He is 3 times as old as Archie. What is Archie's age?

years

- c. Four students play football. 5 times as many students play baseball. How many students play football or baseball?

students

- d. Ten years ago it cost \$35 to buy a ticket to the game. Today, it costs 10 times as much. What is the cost of a ticket today?

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Step Ahead

Five students enter a competition together. They each spend \$5 to enter. They win 2nd prize and receive 10 times the amount they spent. What amount is in each equal share of the prize?

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