

Multiplication and Division Word Problems

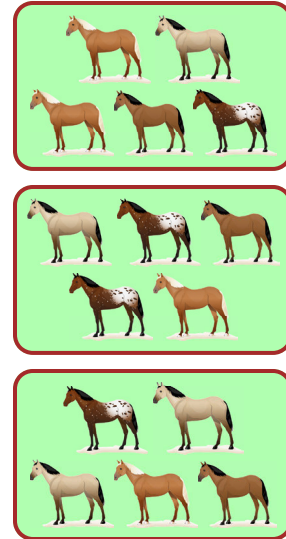
Example: The picture shows horses in pastures. A word problem about this situation could ask about...

- the number of groups (number of pastures);
- the number of horses in each pasture; or
- the total number of horses.

Here is one such word problem:

“Fifteen horses were placed evenly in pastures, five horses in each pasture. How many pastures were needed?”

What is another word problem you could make?



In **multiplication word problems...**

- There are groups that are the same size.
- You are asked the total.
- You know *how many groups there are* and *how many are in each group*.

In **division word problems...**

- There are groups that are the same size.
- You already know the total.
- You are told either how many groups there are or how many are in each group.
- You are asked *how many are in each group* or *how many groups there are*.

1. Solve. Write a division *or* a multiplication for each problem. The box is where you will write either \times or \div . Think: **is the problem asking for a total?** Or **do you already know the total**, and it asks “how many groups/parts” or “how many in each group/part”?

- a. Henry has 90 stamps in his stamp album with ten stamps on each page. How many pages are full of stamps?

$$\underline{\hspace{2cm}} \quad \boxed{\hspace{1cm}} \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

 pages are full of stamps.

- b. Jill puts 12 stamps per page in her stamp album. Eight pages in her album are full of stamps. How many stamps does she have?

$$\underline{\hspace{2cm}} \quad \boxed{\hspace{1cm}} \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

She has stamps.

2. Solve. Write a division *or* a multiplication for each problem. Think: is the problem asking for a total? Or do you already know the total?

a. If four children can fit into one taxi, how many children would fit into 11 taxis?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

There would be children.

b. Four children can fit into one taxi. How many taxis do you need for 12 children?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

You need taxis.

c. If there are ten eggs in each carton, how many eggs are in five cartons?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

There are eggs in five cartons.

d. Ryan placed ten toy cars in bags, with five cars in each bag. How many bags did he use?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

He used bags.

e. Ella can fit three bottles of juice into one plastic bag. How many can she fit into five bags?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

She can fit bottles in five bags.

f. Amy can fit three bottles of juice into one plastic bag. How many bags will she need for 18 bottles?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

She will need bags.

g. Maya, Jayce, and Lily divided 36 cherries equally. How many did each one get?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Each one got cherries.

h. The teacher made five equal groups with a class of 25 students. How many students were in each group?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Each group had students.

i. How many people are in seven vans if each van has five people in it?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

There are people in seven vans.

j. Luke divided a 27-inch-long board into three parts. How long was each part?

$$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Each part was long.