

What is the number of groups?

In division, we look for factors by **having equal amounts of items inside each group**. Recalling the equal groups strategy, we can remember that a product can be solved visually by having equal groups of a certain number of items. Each group contains the same amount of objects inside. The number deciding how many times the total will be separated into having the same size is called the number of groups, which is a factor of the total. Therefore, we can find the number of groups by dividing the total by the size of the group.

That means that **the total is grouped by the size of each group**. The number of times the total is separated is the answer, which is called the **quotient**.

We can read a division equation $A \div B = C$ as **A can have a size of B in the number of groups C**.

For example, $15 \div 3$ can be read as **15 can have a size of 3 in a certain number of groups**.

The quotient will be **5** because grouping 15 into 3 items each will have 5 groups.

Division: The Number of Groups

For example:

15

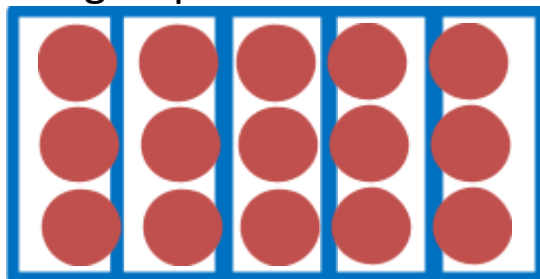
$$\text{Total} \quad \div \quad \text{Size of the group}$$

15 into**3 sized groups**

First, draw 15 same-sized objects:



Then, count up to 3 and encircle into one group. Repeat until you've encircled all into groups.



Count all the groups made with the certain size:

There are **5** groups with a size of 3.

So, the number of groups is **5**.

Division: The Number of Groups

Observe the following equal groups:



What is the total number of stars?

What is the size of each group?

How many groups are there?



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What is the size of each group?

How many groups are there?

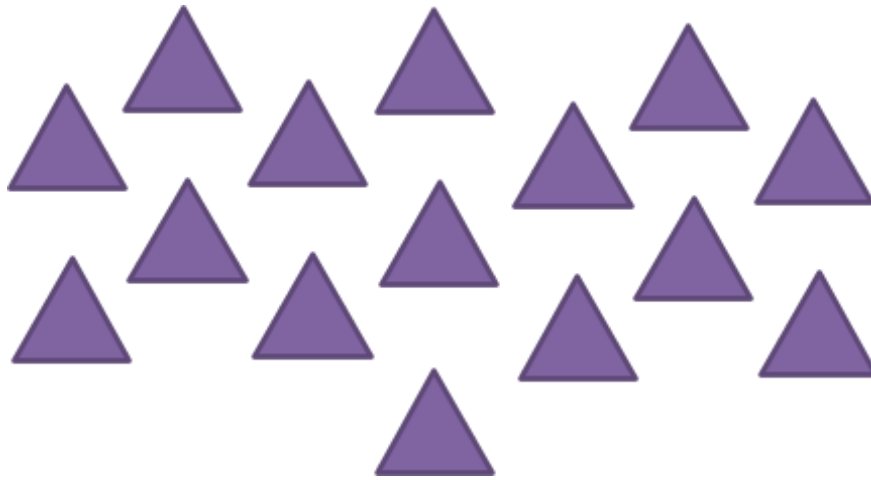
Time to think

1. If the equation is “total \div size of group = number of groups,” what are the equations of the two equal groups examples?

2. Is the number of groups considered a factor?

Division: The Number of Groups

Encircle the triangles into groups of 3.



How many groups are there? _____

$$\underline{\hspace{2cm}} \div 3 = \underline{\hspace{2cm}}$$

Encircle the smiley faces into groups of 2.



How many groups are there? _____

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

Division: The Number of Groups

Encircle the clouds into groups of 4.



How many groups are there? _____

$$\underline{\hspace{2cm}} \div 4 = \underline{\hspace{2cm}}$$

Time to Think

1. Does having 6 groups of a number have the same answer as a number of groups of 6?

2. If there are 2 groups of 4, what is the division equation wherein the quotient is the number of groups?

Name: _____ Period: _____ Date: _____

Division: The Number of Groups

Guided Notes

Math 3

Tiffany has 21 candies. She wants to have packs of 3 candies each. How many packs will she have?

Draw a total of _____ candies and encircle into groups of _____

There are _____ packs of candies.

Valerie baked chocolate chip cookies. She has 24 chocolate chips. She put 4 on each cookie. How many cookies did she bake?

Draw a total of _____ chips and encircle into groups of _____

There are _____ cookies.

