# DIVISION

Division is an essential concept in mathematics. It's a way to split a number into equal parts.

## A DEFINITIONS

Definition **Division** 

**Division** is the process of splitting a number into equal parts or groups. The  $\div$  symbol indicates division. Division can be represented in several ways:

• Numbers:

 $6 \div 3 = 2$ 

• Words:

six divided by three equals two

• Items:



 $6 \div 3 = 2$ : number of blocks in each group

• Part-whole model:

6				
2	2	2		
3 equal groups				

### **B** REPRESENTATIONS OF DIVISION

#### Method Number of items in each group \_

When you know the total and the number of groups, division finds the number of items in each group.

 $total \div number of groups = number of items in each group$ 

For example, we have 12 apples, equally shared among 4 friends.

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Each friend receives  $12 \div 4 = 3$  apples.



#### Method Number of groups $% \mathcal{M} = \mathcal{$

If you know the total and the number of items in each group, division finds the number of groups.

total  $\div$  number of items in each group = number of groups

For example, we have 15 apples and pack them into boxes, each holding 5 apples.



Thus,  $15 \div 5 = 3$  is the number of boxes.

# C INVERSE OPERATIONS: MULTIPLICATION AND DIVISION

Proposition Multiplication and Division are Inverse Operations

Multiplication and division undo each other:

