# DIVISION OPERATION IN MATHEMATICS

Division operation in mathematics is the sharing of a particular numbe into another number of places, and it is primarily represented with symbol, ÷ (divide by). For instance, share 5 breads to 2 people would be represented mathematically like this 5 ÷ 2. It could also be read as 5 divided by 2 or 2 divides 5.

Other mathematical symbols that could replace the divide by (÷) operator are per (/) or ratio (:) symbols. As such,

$$5 \div 2 \equiv \frac{1}{2} \equiv 5:2$$

## Method I: Counting

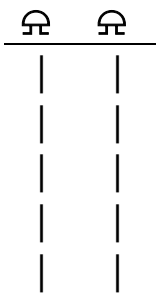
One can simplify 10 ÷ 2 by simply counting 10 strokes and separate them into 2 equal parts.

|||||||||| → |||||, |||||

Or rather, recounted in twos.

|||||||||| → ||, ||, ||, ||, ||

Or rather, share to 2 people.



In all you've find that the answer is 5 as it is that each person would get five of the shared items.

**Method II: Digit Division Method**

We could use the counting method for divisions involving small numbers, however, for divisions involving numbers with more than 2 digits, it is best to use the Digit Division Method. In the digit division method, we divide each digit of the number to be divided using the divisor.

For example:

$$184 \div 4 = \frac{184}{4} = 46$$

**Method III: Prime Number Division Method**

Prime numbers are very useful in arithmetic. They could be used to divide through numbers faster, especially when the denominator or divisor has more than one digit.

For example: 156 ÷ 12

Solution

$$\frac{156}{12}$$

| 2 | **156** |
|---|---|
| 2 | 78 |
| 3 | 39 |
| 13 | 13 |
| | 1 |

152 = 2×2×2×19

| 2 | **12** |
|---|---|
| 2 | 6 |
| 3 | 3 |
| | 1 |

12 = 2×2×3

$$\frac{152}{12} = \frac{2 \times 2 \times 3 \times 13}{2 \times 2 \times 3} = 13.$$