

Download Mathematics Long Division Method

Division is one of the four basic operations of arithmetic, the others being addition, subtraction, and multiplication. The mathematical symbols used for the division operator are the obelus (\div) and the slash ($/$). At an elementary level the division of two natural numbers is – among other possible interpretations – the process of calculating the number of times one number is contained ... Long division is a versatile method for handling complex divisions without using a calculator. It is the preferred method when dividing by a number with two or more digits, particularly if the division is not exact. In arithmetic, long division is a standard division algorithm suitable for dividing multidigit numbers that is simple enough to perform by hand. It breaks down a division problem into a series of easier steps. As in all division problems, one number, called the dividend, is divided by another, called the divisor, producing a result called the quotient. Long division is an algorithm for dividing two numbers, obtaining the quotient one digit at a time. The example above shows how the division of $123456/17$ is performed to obtain the result $7262.11\dots$. The term "long division" is also used to refer to the method of dividing one polynomial by another, as illustrated above. This example illustrates the result $(x^4+x+1)/(x+1)=(x^3-x^2+x)+1/(x+1)$. - Mathematics Long Division Method