

Linear Equations with a Divided By Sign

Background

Division is related to multiplication. For example, if your aunt buys a dozen chocolate chip cookies for her family of four, how many cookies can each person have? You could determine the number of cookies by figuring out what number multiplied by four equals twelve.

$$? \times 4 = 12$$

However, there is another way to approach this problem. It could also be written as an equation with a divided by sign. Twelve divided by four equals what number.

$$12 \div 4 = ?$$

Basic Rules for Reading and Writing a Linear Equation with a Division Sign

In this lesson, we will learn how to read and write a linear equation with a division sign. Linear equations with a **division sign** use the following Nemeth symbols:

⋮⋮ (dots 4-6, dots 3-4) division (divided by) sign (÷)

⋮⋮⋮ (dots 4-6, followed by dots 1-3) equals sign (=)

⋮ (dots 1-2-3-4-5-6) general omission symbol

⋮⋮⋮⋮ (four cells of dots 3-6) long dash (____)

So to write the equation twenty-seven divided by nine equals blank in Nemeth Code, you would write:

$27 \div 9 =$

or numeric indicator, twenty-seven, division
sign, nine, space, equals sign, space, long dash

Notice the equation began with a numeric indicator. It was used at the beginning of the linear equation since the equation began with a numeric symbol such as a whole number or decimal. Also notice that there is not a space before or after the division sign.

Examples

1. $36 \div 4 = 9$ Thirty-six divided by four equals nine.



2. $50 \div 5 =$ Fifty divided by five equals?



3. $100 \div 25 =$ One hundred divided by twenty-five equals blank.



4. $18 \div ? = 2$ Eighteen divided by what number equals two.



Activity time: See if you can re-create the equations with a divided by sign in examples 1 to 4.