

Multiplication and Division Lesson 5

Divided By Sign

Important Note

For all braille examples, emboss the "L5-Mul-Div-Problems-Only.brf" file as a supplement to this lesson.

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.

$$? \times 4 = 12$$

$$\text{⠠?} \text{⠠} \times \text{⠠4} = \text{⠠12}$$

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?

$$12 \div 4 = ?$$

$$\text{⠠12} \text{⠠} \div \text{⠠4} = \text{⠠?}$$

Basic Rules

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

- Division (divided by) sign (dots 4-6, dots 3-4) (\div) $\text{⠠} \div \text{⠠}$
- Equals sign (dots 4-6, dots 1-3) ($=$) $\text{⠠} = \text{⠠}$
- General omission symbol (dots 1-2-3-4-5-6) ⠠
- Long dash (dots 3-6, dots 3-6, dots 3-6, dots 3-6) (____) $\text{⠠} \text{⠠} \text{⠠} \text{⠠}$

The following steps outline how to write the equation twenty-seven divided by nine equals blank in Nemeth Code:

1. Numeric indicator (dots 3-4-5-6) ⠠
2. Twenty-seven (dots 2-3, dots 2-3-5-6) ⠠⠠
3. Division sign (dots 4-6, dots 3-4) ⠡
4. Nine (dots 3-5) ⠠
5. Space
6. Equals sign (dots 4-6, dots 1-3) ⠥
7. Space
8. Long dash (dots 3-6, dots 3-6, dots 3-6, dots 3-6) ⠨⠨⠨⠨

$$27 \div 9 = \underline{\hspace{1cm}}$$

⠠⠠⠠⠠⠠⠠⠠⠠⠡⠠⠠⠨⠨⠨⠨

Notice the equation began with a numeric indicator. It was used at the beginning of the 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. Thirty-six divided by four equals nine.

$$36 \div 4 = 9$$

⠠⠠⠠⠠⠠⠠⠡⠠⠠⠥⠠⠠

2. Fifty divided by five equals

$$50 \div 5 =$$

⠠⠠⠠⠠⠠⠠⠡⠠⠠⠨⠠⠠

Please note that when nothing is written after the equals sign, a general omission symbol is needed.

3. One hundred divided by twenty-five equals blank.

$$100 \div 25 = \underline{\hspace{2cm}}$$

4. Eighteen divided by what number equals two?

$$18 \div ? = 2$$

Activity Time

Write the equations with a divided by sign from Examples 1 to 4.

1. Thirty-six divided by four equals nine.
2. Fifty divided by five equals
3. One hundred divided by twenty-five equals blank.
4. Eighteen divided by what number equals two?