

Dear Family,

During the next few weeks, our math class will be learning about division. We will learn how division is related to subtraction, and how multiplication and division are inverse operations.

You can expect to see homework that provides practice with division.

Here is a sample of how your child will be taught to use repeated subtraction to solve division problems.

Vocabulary

dividend The number that is to be divided in a division problem

dividend, divisor, quotient The parts of a division problem. There are two ways to record division.

$$\begin{array}{ccccccc} 10 & \div & 2 & = & 5 \\ \uparrow & & \uparrow & & \uparrow \\ \text{dividend} & & \text{divisor} & & \text{quotient} \end{array}$$

$$\begin{array}{r} \leftarrow \text{quotient} \\ \text{divisor} \rightarrow 2 \overline{)10} \\ \uparrow \\ \text{dividend} \end{array}$$

MODEL Use Repeated Subtraction to Divide

This is how we will be using repeated subtraction to divide.

STEP 1

Start with the dividend and subtract the divisor until you reach 0.

$$15 \div 5 = \underline{\quad}$$

$$\begin{array}{r} 15 \\ -5 \\ \hline 10 \end{array} \quad \begin{array}{r} 10 \\ -5 \\ \hline 5 \end{array} \quad \begin{array}{r} 5 \\ -5 \\ \hline 0 \end{array}$$

STEP 2

Count the number of times you subtract 5.

$$\begin{array}{r} 15 \quad 10 \quad 5 \\ -5 \quad -5 \quad -5 \quad (3 \text{ times}) \\ \hline 10 \quad 5 \quad 0 \end{array}$$

There are 3 groups of 5 in 15.

STEP 3

Record the quotient.

$$15 \div 5 = 3, \text{ or}$$

$$\begin{array}{r} 3 \\ 5 \overline{)15} \end{array}$$

Fifteen divided by 5 equals 3.

Tips

Counting Back on a Number Line

Counting back on a number line is another way to find a quotient. On a 0–15 number line, for example, start at 15 and count back by 5s to 0. Then count the number of jumps on a number line (3 jumps) to find that $15 \div 5 = 3$.

Activity

Display a number of objects that are divisible by 5. Have your child use repeated subtraction to solve division problems. For example: "Here are 20 crayons. I want to subtract 5 crayons at a time until there are no crayons left. How many times can I subtract?" Check answers by arranging the objects.