



Dear Family,

Your child is familiar with multiplication from earlier units. Unit 4 of *Math Expressions* extends the concepts used in multiplication to teach your child division. The main goals of this unit are to:

- Learn methods for dividing whole numbers up to five digits.
- Use estimates to check the reasonableness of answers.
- Solve problems involving division and remainders.

Your child will learn and practice techniques such as the Rectangle Sections, Expanded Notation, and Digit-by-Digit methods to gain speed and accuracy in division. At first, your child will learn these methods using 5 as the divisor as most students have little difficulty with 5 count-bys. Later the methods are extended to divisors of 2, 3, 4, 6, 7, 8, and 9. Then your child will learn to divide when there is a zero in the quotient or dividend and to watch out for potential problems involving these situations.

Examples of Division Methods:

Rectangle Sections Method

$$\begin{array}{r}
 60 + 6 = 66 \\
 5 \overline{) \begin{array}{|l} 330 \\ - 300 \\ \hline 30 \end{array} \begin{array}{|l} 30 \\ - 30 \\ \hline 0 \end{array}}
 \end{array}$$

Expanded Notation Method

$$\begin{array}{r}
 6 \overline{) 66} \\
 \underline{60} \\
 60 \\
 \underline{5} \overline{) 330} \\
 \underline{- 300} \\
 30 \\
 \underline{- 30} \\
 0
 \end{array}$$

Digit-by-Digit Method

$$\begin{array}{r}
 66 \\
 5 \overline{) 330} \\
 \underline{- 30} \\
 30 \\
 \underline{- 30} \\
 0
 \end{array}$$

Your child may use whatever method he or she chooses as long as he or she can explain it. Some children like to use different methods.

Your child will also learn to interpret remainders in the context of the problem being solved, for example, as fractions of a whole or as decimal amounts of money.

Finally, your child will apply this knowledge to solve mixed problems with one or more steps and using all four operations.

If you have questions or problems, please contact me.

Sincerely,
Your child's teacher