



Family Letter for Unit 8

Dear Family,

During the next few weeks, our math class will be learning about rational numbers, algebraic expressions, equations, and inequalities.

You can expect to see work that provides practice in adding, subtracting, multiplying, and dividing rational numbers. Later, the work will involve algebraic expressions, equations, and inequalities.

Vocabulary

evaluate Substituting given values for the variables and performing the operations to find the value of an expression.

equation A mathematical sentence with an equals sign.

rational number A number that can be expressed as a ratio of two numbers.
 $1.3 = \frac{13}{10}$

inequality A number sentence that states that two expressions are not equal. $6 + 7 > 5 + 8$

This is how we will be evaluating expressions with rational numbers.

When evaluating expressions with rational numbers, use this order of operations.

First complete operations within parentheses.

Next evaluate powers (exponents).

Then multiply and divide in order from left to right.

Finally, add and subtract in order from left to right.

Evaluate $5d + 6(-z + 3^2)$, given $d = \frac{3}{4}$ and $z = 4$.

Both $5d$ and $6(-z)$ mean multiply the number by the value of the variable.

Step 1 $5(d) + 6(-z + 3) = 5(\frac{3}{4}) + 6(-4 + 3)$

Substitute values for d and z .

Step 2 $= 5(\frac{3}{4}) + 6(-1)$

Work inside parentheses. Notice there are no powers (exponents).

Step 3 $= 3\frac{3}{4} + -24$

Multiply.

Step 4 $= -20\frac{1}{4}$

Add.

As your child works through this unit, ask how working with rational numbers is like working with fractions and decimals. Then ask how it is different.

Sincerely,



Technology

Check out *Education Place* at eduplace.com/kids/mw/ for *e•Glossary*, *e•Word Games*, test prep practice, and more.