



6th Grade Prerequisite Skills

At the beginning of the year, your child should be able to...

- Add and subtract fractions with different denominators (bottom numbers)
- Multiply a fraction by a whole number or another fraction
- Divide fractions by whole numbers and whole numbers by fractions to solve word problems
- Explain why a fraction is equal to another fraction
- Interpret multiplication as scaling (resizing)

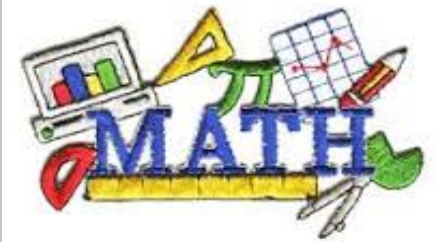


Future Content Skills

Next year, your child will...

- Add, subtract, multiply, and divide rational numbers in any form, including whole numbers, fractions, and decimals)
- Solve multi-step problems involving positive and negative rational numbers
- Analyze proportional relationships and use them to solve real-world problems
- Calculate the unit rates associated with ratios of fractions, such as the ratio of $\frac{1}{2}$ a mile for every $\frac{1}{4}$ of an hour
- Recognize and represent proportional relationships in various ways, including using tables, graphs, and equations
- Identify the unit rate in tables, graphs, equations, and verbal descriptions of proportional relationships

6th Grade Math



What does your
child need to
know?



A guide for parents

6nd Grade Core Content Skills

Ratios and Rates:

- Understanding and applying the concepts of ratios and unit rates, and using the correct language to describe them (for example, the ratio of wings to beaks in a flock of birds is 2 to 1, because for every 2 wings there is 1 beak)

Number Sense:

- Building on knowledge of multiplication and division to divide fractions by fractions
- Understanding that positive and negative numbers are located on opposite sides of 0 on a number line
- Using pairs of numbers, including negative numbers, as coordinates for locating or placing a point on a graph

Data and Analysis:

- Collect, organize, display, interpret and analyze data

Equations and Expressions

- Writing and determining the value of expressions with whole-number exponents (such as $15+32$)
- Identifying and writing equivalent mathematical expressions by applying the properties of operations. For example, recognizing that $2(3+x)$ is the same as $6+2x$
- Understanding that solving an equation such as $2+x = 12$ means answering the question, “What number does x have to be to make this statement true?”

Dependent and Independent Variables:

- Representing and analyzing the relationships between independent and dependent variables
- Solving problems involving area and volume

Things to do with your child

*Ask your child to calculate the unit rates of items purchased from the grocery store. For example, if 2 pounds of flour cost \$3.00, how much does flour cost per pound?

*Have your child determine the amount of ingredients needed when cooking. For example, if a recipe calls for 8 cups of rice to serve 4 people, how many cups of rice do you need to serve 6 people?

*Ask your child to explain data found in graphs from a newspaper or magazine.

*Encourage your child to stick with it whenever a problem seems difficult. This will help your child see that everyone can learn math.

*Praise your child when he or she makes an effort, and share in the excitement of math.

Parent Support Links

[ASD parent resources](http://www.asdk12.org/math/parentresources/) is a place to find “Homework help”, “Do Anytime Activities”, “Think Central Support”, and access to the “Go Math! eGlossary.”

<http://www.asdk12.org/math/parentresources/>

Keep math fun!

Talk and explain your