6TH GRADE MATH NEWSLETTER

Feb.—April 2016

Our Unit 4 Math Concepts

⁎ Use variables to represent numbers and write expressions when solving real world or mathematical problems.

⁎ Solve an equation or inequality to answer the question: which values from a specified set, if any, make the equation or inequality true? and check the solution using substitution to determine whether a given number in a specified set makes an equation or inequality true. (including formulas V=lwh and V=bh).

⁎ Write and solve one step equations that represent real world or mathematical problems.

⁎ Write an inequality of the form x > c or x < c to represent a constraint or condition in a real world or mathematical problem and represent them on a number line diagram

⁎ Use variables to represent two quantities that change in relationship to one another in a real world problem and write an equation to express one quantity, thought of as the dependent variable, in terms of another quantity, thought of as the independent variable.

⁎ Analyze the relationship between the dependent and independent variables in an equation using graphs and tables. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.

Equations and Inequalities

So far this year, 6th grade students have been working with variables to simplify algebraic expressions. We are now venturing into the world of equations and inequalities! We need to remember to be very deliberate and precise with our vocabulary in math, but especially careful in this unit. Some short definitions are provided to the right, and video lessons below.

Video Lessons:

- Solving One-Step Equations with Substitution (online pan balance)
- Solving One-Step Equations using the Inverse Operation
- Writing Algebraic Expressions
- Write and Solve Equations
- Write and Graph Inequalities and a second video
- Dependent and Independent Variables

Vocabulary

› An **expression** is a combination of values (and) operation symbols (NO equal sign!).
Ex: $2x^4 + 4x$

› An **equation** has two expressions separated by an equal sign (HAS an equal sign!).
Ex: 3x + 7 = 16

› An **inequality** has two expressions separated by an inequality sign.
Ex: 4 + x > 25

› The value of a **dependent variable** depends on the independent variable.
Ex: $A = \pi r^2$ (area is dependent on radius)

› An **independent variable** may have it's values chosen without consideration of other values.

6th Grade Tech Links

https://www.edmodo.com/

https://www.khanacademy.org/

https://www.pearsonrealize.com/#/

A copy of this newsletter can be found on the school website with connecting links for more information.

LearnZillion Video Information: Email: CIoffice@franklintwpschools.org **Password**: math