Sixth Grade Math Review, Master, and Extend

## Dear Parents,

Summer presents a great opportunity to continue learning from home. Students can review standards learned in Sixth Grade, ensure mastery of key standards, and preview standards for Seventh Grade.

## Concepts for students to review from Sixth Grade:

As each student may need specific standards for review and mastery, please use Georgia Virtual Learning for this need. Click here to be taken directly to the MS Math $6^{\text {th }}$ Grade modules. Click on the "View" for the areas you feel your child might need additional review and practice within the website.

## OERMs Math 6th Grade

| Number System Fluency | View |
| :--- | :---: |
| Rate, Ratio and Proportional Relationships | View |
| Expressions | View |
| One Step Equations | View |
| Area and Volume | View |
| Statistics | View |
| Rational Explorations | View |
| Show What You Know | View |

## Concepts students may preview for $7^{\text {th }}$ Grade (link will take you to the Ms $7^{\text {th }}$ Grade

 Georgia Virtual Learning modules):- Adding and subtracting rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
- Show that a number and its opposite have a sum of 0 (are additive inverses).
- Understand $\mathrm{p}+\mathrm{q}$ as the number located a distance $|q|$ from p , in the positive or negative direction depending on whether $q$ is positive or negative.
- Solve real-world mathematical problems leading to 1-step and 2-step equations with rational numbers. For example, the perimeter of a rectangle is 54 cm . Its length is 6 cm . What is its width?


## Vocabulary:

Absolute Value: The distance between a number and zero on a number line. The symbol for absolute value is $\mid$

Integer: The set of whole numbers \& their opposites
Example :\{..-2, -1, 0, 1, $2 \ldots\}$

Inverse Operation: Operations that undo each other or are opposite, such as addition and subtraction
Rational numbers: The set of numbers that can be written in the form of $\frac{a}{b}$ where $\mathrm{a} \& \mathrm{~b}$ are integers and $b \neq 0$

Coefficient: the number part of a term that includes a variable. For example, 3 is the coefficient of the term $3 x$

Constant: a quantity having a fixed value that does not change or vary, such as a number. For example, 5 is the constant of $x+5$

Equation: a mathematical sentence formed by setting two expressions equal
Term: a number, a variable, or a product and a number and variable
Variable: a symbol, usually a letter, which is used to represent one or more numbers

## Practice Problem 1

You have $\$ 4$ and you need to pay a friend $\$ 3$. What will you have after paying your friend? Represent your answer on a number line.

Solution: $4+(-3)=1$ or $(-3)+4=1$


## Practice Problem 2

Your cell phone bill is automatically deducting $\$ 32$ from your bank account every month. How much will the deductions total for the year?

Solution: $-32+-32+-32+-32+-32+-32+-32+-32+-32+-32+-32+-32=\$-384$

## Practice Problem 3

The youth group is going on a trip to the state fair. The trip costs $\$ 52$. Included in that price is $\$ 11$ for a concert ticket and the cost of 2 passes, one for the rides and one for the game booths. Each of the passes cost the same price. Write an equation representing the cost of the trip and determine the price of one pass.

Solution: bar model and algebraic solutions

| x | x | 11 |
| :---: | :---: | :---: |
| $2 x+11=52$ | 52 |  |
|  |  |  |
| $x=41$ |  |  |

## Practice Problem 4

Amie had $\$ 26$ dollars to spend on school supplies. After buying 10 pens, she had $\$ 14.30$ left. Write an equation representing the cost of the school supplies. How much did each pen cost?

Solution: $26=10 x+14.30$
$\frac{-14.30}{\frac{11.70}{10}=\underline{10 x}} 10$
$x=1.17 .30$

Each pen cost $\$ 1.17$

## Internet Resources

Textbook Online: connected.mcgraw-hill.com

| Textbook <br> Publisher | Print and/or consumable | Online Access |
| :--- | :--- | :--- |
| My Math <br> McGraw-Hill <br> 2013 | Consumable Workbook | http://connected.mcgraw- |
| hill.com/connected/login.do |  |  |
|  |  | Student User ID: ccsd(student ID) <br> Password: cobbmath1 |

Learning Links to build background knowledge and to preview $7^{\text {th }}$ Grade:

| Skill \& Concept | Website | Link |
| :---: | :---: | :---: |
| Early Math | - KHANACADEMY <br> Getting started is simple: Click Start Mission, Create a New Account, sign up using either gmail, facebook or email address. Enter your name and birthdate, follow the link that is sent to your account, and finish by signing up with a username and password. | https://www.Khanacademy.org/math/early-math |
| Computing quotients using the division rule | LearnZillion | https://learnzillion.com/lesson_plans/7615-computing-quotients-using-the-fractions-division-rule |
| Perform operations with decimals using the standard algorithm (6.NS.B.3) | LearnZillion | https://learnzillion.com/resources/72552-perform-operations-with-decimals-using-the-standard-algorithm-6-ns-b-3 |


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| 7 <br> Grade <br> Online Math <br> Games | AdaptedMind | www.adaptedmind.com/gradelist.php?grade=7 |

