



# Eighth Grade Math Review, Master, and Extend

Dear Parents,

Summer presents a great opportunity to continue learning from home. Students can review standards learned in Eighth Grade, ensure mastery of key standards, and preview standards for Algebra 1.

## Concepts for students to review from Eighth 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 8<sup>th</sup> Grade modules. Click on the “View” for the areas you feel your child might need additional review and practice within the website.

### MS Math 8th Grade

Transformations, Congruence, and Similarity	<a href="#">View</a>
Exponents	<a href="#">View</a>
Geometric Applications of Exponents	<a href="#">View</a>
Functions	<a href="#">View</a>
Linear Functions	<a href="#">View</a>
Linear Models and Tables	<a href="#">View</a>
Solving Systems of Equations	<a href="#">View</a>
Show What We Know	<a href="#">View</a>

**Concepts students may preview for Algebra I** (link will take you to the Algebra I Grade Georgia Virtual Learning modules):

- Constraints by equations and inequalities including systems.
- Rearrange formulas to solve.
- Solve equations and inequalities with letters as coefficients.

**Vocabulary:** Have students define the following phrases and talk about what that means to them in terms of solving math problems. Just knowing the definition is not as meaningful as understanding how and why we use these terms in the language of Algebra.

**Average Rate of Change**

**Constant Rate of Change**

**Continuous**

**Constraint**

**Domain**

**Literal Equation**

**Linear Function**

**Linear Model**

**Properties of Operations**

**Range**

**Slope**

**X-Intercept**

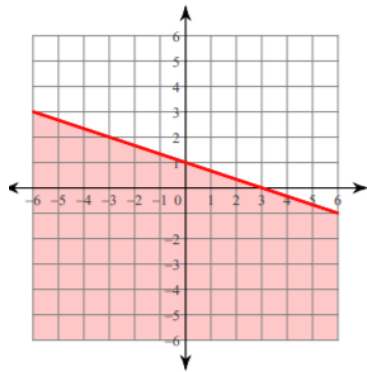
**Y-Intercept**

---

## Practice Problem 1

Using the inequality and graph, determine a solution and non-solution to the inequality.

$$y \leq -\frac{1}{3}x + 1$$



**Solution:** Answers may vary – solutions must be within the shaded area; non-solutions are outside the shaded area

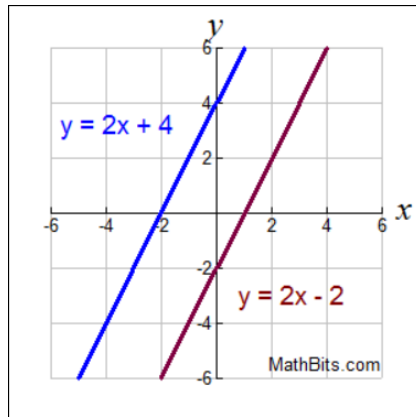
Possible answers: solution: (-4, -2); non-solution: (1, 3)

---

## Practice Problem 2

Solve the system of equations: 
$$\begin{cases} y - 2x = 4 \\ y = 2x - 2 \end{cases}$$

**Solution:** no solution



15 = 3  
No solution

### Practice Problem 3

Solve the following equation for  $x$ :  $-3x + 2c = -3$

**Solution:**  $-3x + 2c = -3$


$$\begin{array}{r} -2c \quad -2c \\ \underline{-3x = -2c - 3} \\ -3 \quad -3 \\ x = \frac{2c+3}{3} \end{array}$$

### Internet Resources

**Textbook Online:** [connected.mcgraw-hill.com](http://connected.mcgraw-hill.com)

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

## Learning Links to build background knowledge and to preview Algebra 1:

Skill & Concept	Website	Link
Early Math	 <p>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.</p>	<a href="https://www.khanacademy.org/math/early-math">https://www.khanacademy.org/math/early-math</a>