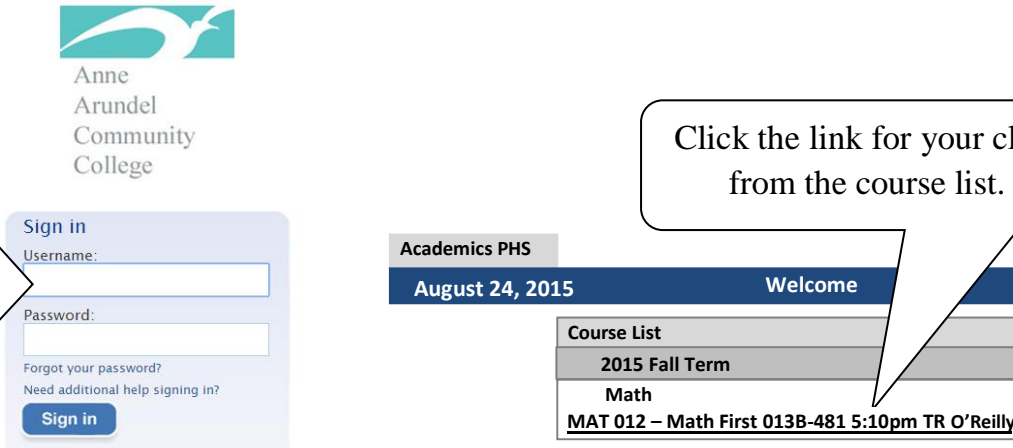


# MAT 013B Math FIRS<sup>3</sup>T: Day 1 Handout

## Using MyLabsPlus to Take Notes & Complete Assignments

1. Use **Firefox** or **Google Chrome** to access: [www.aacc.mylabsplus.com](http://www.aacc.mylabsplus.com)



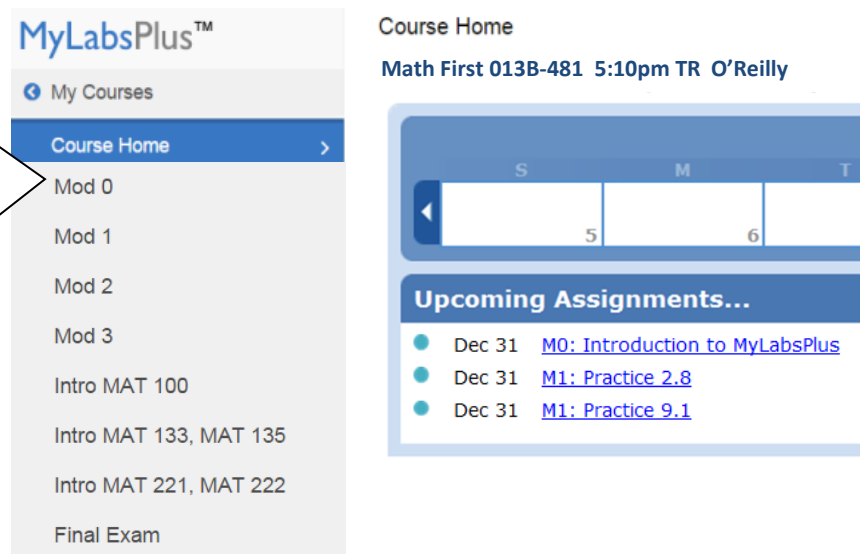
Enter your **User Name** & **Password**.  
Click **Sign In**.

Click the link for your class from the course list.

2. MAT 013B is divided into 3 different modules.

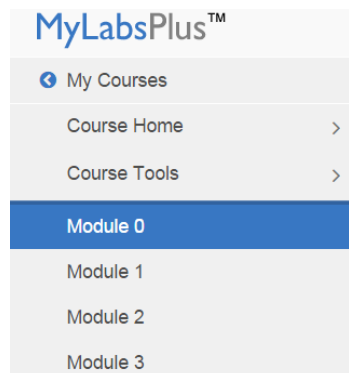
Click on **Module 0** to get started.

The remaining **Intro Modules** prepare you for the specific math requirements in your program of study. You will complete only 1 of these Intro Modules before taking the Final Exam.



Each Mod starts with a set of directions to guide you through the requirements of the module.

3.



### Module 0

Each module has a set of instructions:

1. Begin this module by clicking the **Notes for Section 3.3** link.
2. Follow the directions found in the **Multimedia Textbook**.
3. Once you have completed the **Multimedia Textbook** to MyLabsPlus assignment.

- ▶ [Notes for Section 3.3](#)
- ▶ [M0: Introduction to MyLabsPlus](#)

Click the **Notes for Section 3.3** to open the **Multimedia Textbook**.

This is the interactive e-book that will be used for learning math concepts and skills and completing the required Note Taking Guide.

4. Below are some useful features of your Multimedia Textbook.

Click the forward or back arrows to view other textbook pages.

The Section Titles are clearly numbered. This is Section 3.3 of the Multimedia Textbook.

Video lecture for the entire section (15 to 20 mins.)

Videos for each individual objective (3 to 5 mins.)

**3.3 Intercepts**

**OBJECTIVES**

- 1 Identify Intercepts of a Graph.
- 2 Graph a Linear Equation by Finding and Plotting Intercepts.
- 3 Identify and Graph Horizontal Lines.

**OBJECTIVE 1 Identifying Intercepts**

In this section, we graph linear equations in two variables by identifying intercepts. For example, the graph of  $y = 4x - 8$  is shown on the right. Notice that this graph crosses the y-axis at the point  $(0, -8)$ . This point is called the **y-intercept**. Likewise, the graph crosses the x-axis at  $(2, 0)$ , and this point is called the **x-intercept**. The intercepts are  $(2, 0)$  and  $(0, -8)$ .

The **Objectives** are always listed at the beginning of each section of the multimedia text. In the Note Taking Guide you will copy the objectives, and include sample problems illustrating each objective.

Also click the vertical bars on the left/right sides to move pages.

**Helpful Hint**  
If a graph crosses the x-axis at  $(-3, 0)$  and the y-axis at  $(0, 7)$ , then

$(-3, 0)$        $(0, 7)$   
 ↑                  ↑  
 x-intercept    y-intercept

Notice that for the y-intercept, the x-value is 0 and for the x-intercept, the y-value is 0.  
**Note:** Sometimes in mathematics, you may see just the number 7 stated as the y-intercept, and  $-3$  stated as the x-intercept.

**Finding x- and y-intercepts**  
 To find the x-intercept, let  $y = 0$  and solve for  $x$ .  
 To find the y-intercept, let  $x = 0$  and solve for  $y$ .

**Rules and Helpful Hints** are highlighted to provide key concepts, strategies, and vocabulary. These can be included in the blank space for summary notes at the beginning of the Note Taking Guide.

**Interactive Links in the Multimedia Textbook**



**Video Icons**



**You Try It Problems**



**Animations**

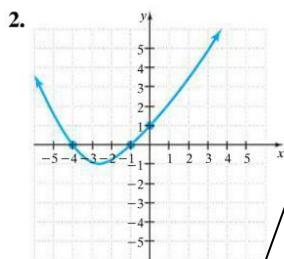
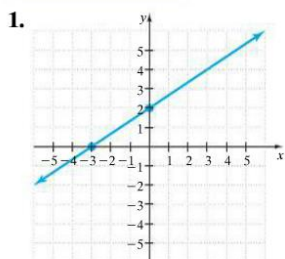
*Use pgs. 3 – 4 to try completing a sample Note Taking Guide.*

Use the following information to locate the correct example problems listed for Objective 1 below. Copy the required information into each box.

**Locate Objective 1 on pg. 194 in Section 3.3.**

**EXAMPLES**

Identify the  $x$ - and  $y$ -intercepts.



**Solution**

$x$ -intercept:  $(-3, 0)$   
 $y$ -intercept:  $(0, 2)$



**Copy & Solve a Video Problem:**

You are directed to Copy & Solve the Example 2 Video Problem (from pg. 194) and take notes in the designated box below.

If you roll the mouse over the video icon, you will see this is the Example 2 Video.

**Copy & Solve a You Try It Problem:**

You are directed to Copy & Solve the Example 2 You Try It Problem (from pg. 194) and take notes in the designated box below.

If you roll the mouse over the video icon, you will see this is Example 2.

Copy Objective 1 here.

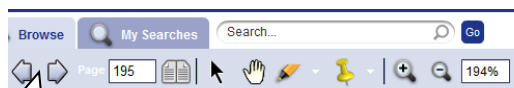
**Write Objective 1:**

<p><b>Copy &amp; Solve the Example 2 Video Problem</b> From pg. 194 of the Multimedia Textbook</p>	<p><b>Copy &amp; Solve the Example 2 You Try It Problem</b> From pg. 194 of the Multimedia Textbook</p>

**Write Objective 2:**

<p align="center"><b>Copy &amp; Solve the Example 6 Problem</b> From pgs. 195-196 of the Multimedia Textbook</p>	<p align="center"><b>Copy &amp; Solve the Example 6 You Try It Problem</b> From pg. 195 of the Multimedia Textbook</p>

*Use the following information to locate the correct example problems listed for Objective 2 above. Copy the required information into each box.*



Move to pg. 195 to find Objective 2.

Locate **Objective 2** in the Multimedia Textbook and write it in the space above.

**OBJECTIVE 2** **Using Intercepts to Graph a Linear Equation**

Given the equation of a line, intercepts are usually easy to find since one coordinate is 0.

One way to find the y-intercept of a line is to let  $x = 0$ . A point on the y-axis has an x-coordinate of 0.



**EXAMPLE 6** Graph  $x - 3y = 6$  by finding and plotting the intercepts.

**Solution** Let  $y = 0$  to find the x-intercept and let  $x = 0$  to find the y-intercept.

Let  $y = 0$

Let  $x = 0$

$$x - 3y = 6$$

$$0 - 3y = 6$$

$$-3y = 6$$

Each objective has several **Examples** with step-by-step solutions to help you understand the problem.

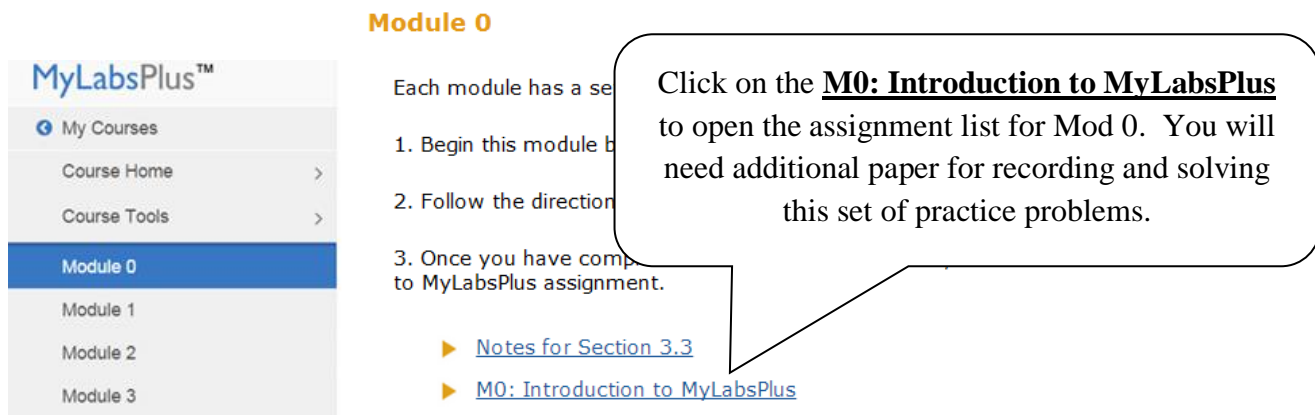
Copy & Solve the **Example 6 Problem** in the corresponding box above. Also copy the Graph for Example 6 from pg. 196.

Copy & Solve the **Example 6 You Try It Problem** in the corresponding box above. Show your work and the correct answer.

You have completed the sample Note Taking Guide for Day 1 on Section 3.3. Close the Multimedia Text Window (or close the TAB on your Browser Bar for the Multimedia Text). This should return you to the Mod 0 instruction screen.

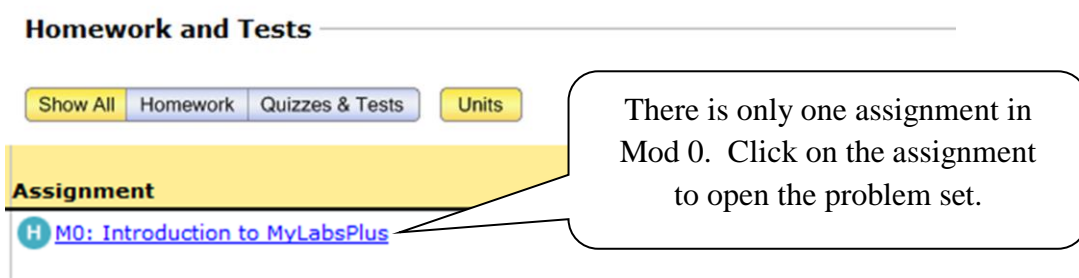
### Next, try a sample homework assignment in MyLabsPlus.

1.



The screenshot shows the MyLabsPlus interface for Module 0. On the left is a navigation menu with 'My Courses' at the top, followed by 'Course Home', 'Course Tools', 'Module 0' (highlighted in blue), 'Module 1', 'Module 2', and 'Module 3'. The main content area is titled 'Module 0' and contains instructions: 'Each module has a set of practice problems. 1. Begin this module by clicking on the assignment link. 2. Follow the directions for the assignment. 3. Once you have completed the assignment, click on the assignment link to return to the MyLabsPlus assignment.' Below the instructions are two links: 'Notes for Section 3.3' and 'M0: Introduction to MyLabsPlus'. A callout box points to the second link with the text: 'Click on the **M0: Introduction to MyLabsPlus** to open the assignment list for Mod 0. You will need additional paper for recording and solving this set of practice problems.'

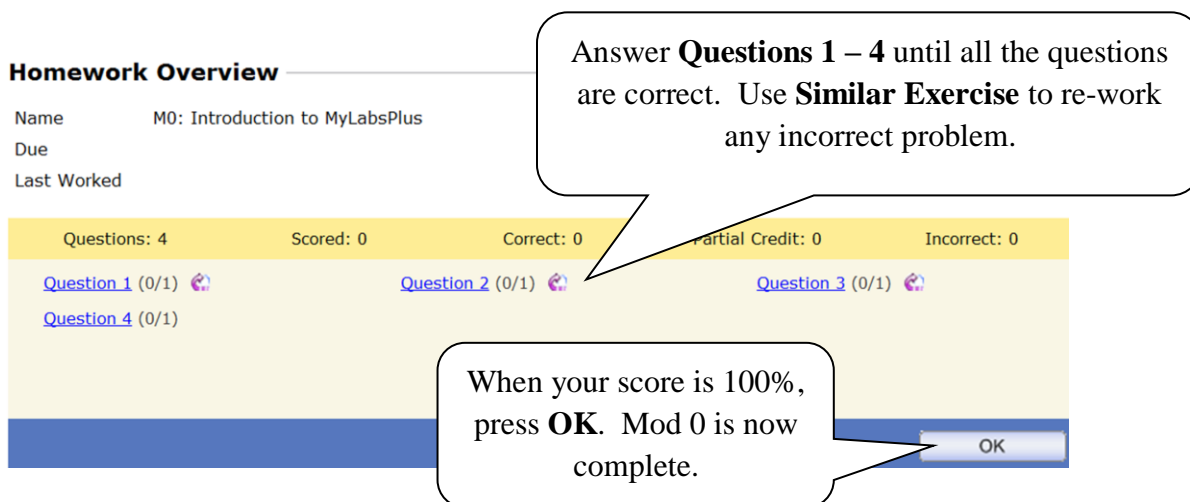
2.



The screenshot shows the 'Homework and Tests' section of the MyLabsPlus interface. At the top are four tabs: 'Show All', 'Homework', 'Quizzes & Tests', and 'Units'. Below the tabs is a yellow header labeled 'Assignment'. Underneath, there is a single assignment link: 'H M0: Introduction to MyLabsPlus'. A callout box points to this link with the text: 'There is only one assignment in Mod 0. Click on the assignment to open the problem set.'

Use the blank paper on pg. 6 to record your homework problems from this *M0: Introduction to MyLabsPlus* practice set. Record each of the 4 Questions and show both the work and the solution.

3.



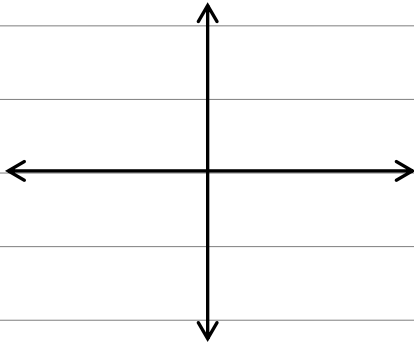
The screenshot shows the 'Homework Overview' page. At the top, it displays 'Name M0: Introduction to MyLabsPlus', 'Due', and 'Last Worked'. Below this is a summary bar with the following statistics: 'Questions: 4', 'Scored: 0', 'Correct: 0', 'Partial Credit: 0', and 'Incorrect: 0'. Underneath the summary bar are four question links: 'Question 1 (0/1)', 'Question 2 (0/1)', 'Question 3 (0/1)', and 'Question 4 (0/1)'. A callout box points to the question links with the text: 'Answer **Questions 1 – 4** until all the questions are correct. Use **Similar Exercise** to re-work any incorrect problem.' At the bottom of the page, there is a blue bar with an 'OK' button. A callout box points to the 'OK' button with the text: 'When your score is 100%, press **OK**. Mod 0 is now complete.'

- You will need additional paper for recording and solving the practice problems in each assignment.
- Loose leaf paper can be added to your Note Taking Guide after each section, or you can use a separate spiral notebook to record homework problems.
- Label each problem set with the name of the MyLabsPlus Assignment and the date you work the problems.

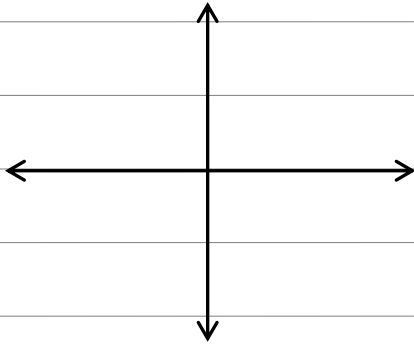
*MO: Introduction to MyLabsPlus*

*Date:*

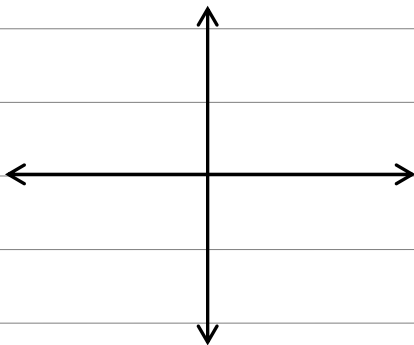
1.



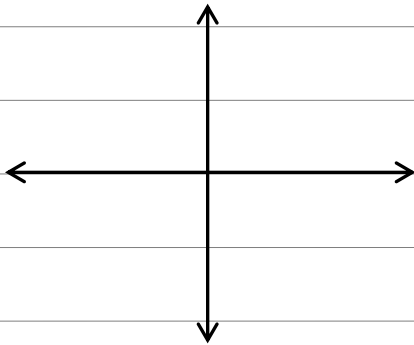
2.



3.



4.



# Useful Homework Features of MyLabsPlus

Click on the problem number to move to the next question.

Your current homework score.

**Help Features** are always available on homework assignments and can be used for any problem that you are struggling to solve.

**Math Tools** for entering answers such as fractions or exponents.

**Graphing Tools** for drawing lines and curves.

**Similar Exercise** allows you to re-work any incorrect problem.

Press **Save** to keep your current score.

The screenshot shows a homework problem for the equation  $x - y = 7$ . It includes a table for ordered pairs, a graphing grid with a line plotted, and a sidebar with buttons for 'Help Me Solve This', 'View an Example', 'Textbook', 'Ask My Instructor', and 'Print'. The 'HW Score' is 80% (4 of 5 pts).

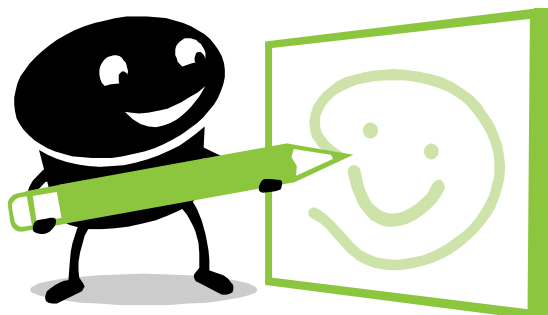
## To Exit MyLabsPlus:

Close any open windows (or TABS in the Browser Bar). This returns you to the MyLabsPlus home screen.

Click your name in the upper right corner and press **Sign Out** to exit MyLabsPlus.

The screenshot shows the MyLabsPlus home screen with a sidebar menu containing 'My Courses', 'Course Home', 'Course Tools', and 'Module 0'. The main content area shows 'Module 0' instructions. In the top right corner, the user's name 'Henry' is displayed, and a dropdown menu is open showing 'Henry Toman', 'hdtoman@mymail.aacc.edu', and a 'Sign Out' button.

# You have completed the Day 1 Orientation to Math FIRS<sup>3</sup>T



## What is Math FIRS<sup>3</sup>T ?

**F**OCUSED class time for hands-on learning.

**I**NDIVIDUALIZED instruction for each student.

**R**ESOURCES for online help and open tutoring labs on campus.

**S**UPPORT and assistance from a Professor during every class.

**S**TUDENT centered approach to build confidence and understanding.

**S**UCCESS due to mastery of the content in each assignment.

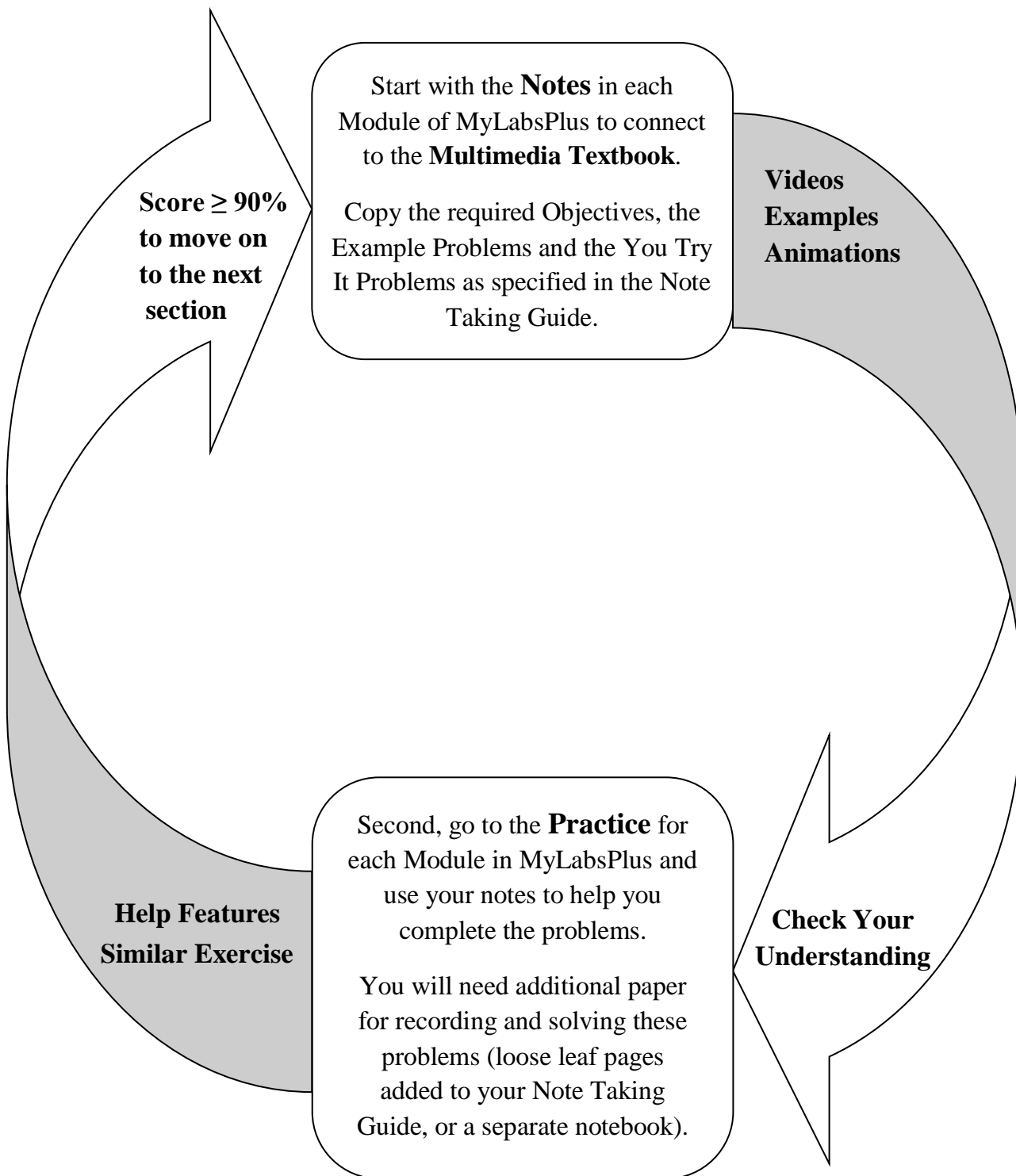
**T**ECHNOLOGY that enhances student engagement and achievement.

## What are ALL these additional pages?

- The first set of pages from the Note Taking Guide is included so you can immediately start working on the first part of Module 1.
- You must purchase a MAT 013B Note Taking Guide from the College Bookstore in order to complete the last part of Module 1 plus the remaining modules in the course.
- Remember to ADD these pages to the beginning of your purchased Note Taking Guide.



# The Daily Flow of Math FIRS<sup>3</sup>T



# Math 013B Note-Taking Guide

## Table of Contents

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### Notes for Unit 1: Module 1

- The first part of Unit 1 is included in this Day 1 Handout.
- The last part of Unit 1, Units 2 & 3, and the Introductory Topics are included in the MAT 013B Note Taking Guide that must be purchased from the AACC Bookstore.

### Notes for Unit 2: Module 2

### Notes for Unit 3: Module 3

### Notes for Introductory Topics:

*Select 1 Introductory Topic based upon based upon the specific Math requirements in your program of study.*

- Intro to MAT 100
- Intro to MAT 133, MAT 135
- Intro to MAT 221, MAT 222

### Final Exam Preparation

# Test-Out Options: For Students Interested in Accelerating

*Note: If you are not interested in the Test-Out Options, then skip to pg. 15 and begin working on the notes for M1: Practice 2.8.*

## MAT 013B: Unit 1

Every unit has **Test-Out** options for the Unit Test.

### Test-Out Practice Unit 1: M1 Proctored Unit 1 Test-Out: M1

For example, if you pass the **Proctored Unit 1 Test-Out** with a **75%** or higher, then you skip Module 1 and move ahead to Module 2 (Unit 2).

M1: Practice 2.8  
M1: Tips for Success  
M1: Practice 9.1  
M1: Practice 3.6  
M1: Practice 8.1  
M1: Practice 4.1 - 4.3, 4.5  
M1: Practice 8.2  
Test Prep Unit 1  
*Syllabus Quiz*

If you pass the **Proctored Unit 2 Test-Out** with a **75%** or higher, then you skip Module 2 and move ahead to Module 3 (Unit 3).

### NOTEBOOK CHECK Proctored Unit 1 Test

### Test-Out Practice Unit 2: M2 Proctored Unit 1 Test-Out: M2

#### Important Test-Out Facts:

- You only get 1 attempt to Test-Out.
- Try to complete the Notes for the modules included on the Test-Out **before** completing the Test-Out Practice Problems.
- Record the Test-Out Practice Problems.
- Complete the Test-Out Practice to 90%. Do **NOT** complete the other module assignments.
- If you do not score 75% or higher, then you **MUST** complete all of the required Notes and practice assignments in order to re-test.

M2: Practice 7.1 & Factoring Review  
M2: Practice 7.6  
M2: Practice 12.3  
M2: Practice 12.5  
M2: Practice 12.7  
Test Prep Unit 2

### NOTEBOOK CHECK Proctored Unit 2 Test

## Understanding the Guidelines for Testing Out of Proctored Unit Tests

- ❑ Consider trying to Test-Out of any Proctored Unit Tests for which you are familiar with the content.
- ❑ **Requirement 1:** Record each problem, and its worked solution, from the Test-Out Practice using the provided sheets in the Note Taking Guide. Your instructor, or the lab staff, will check and approve this work prior to a Test-Out attempt.
- ❑ **Requirement 2:** Complete the Test-Out Practice to 90%. Please be aware that the Test-Out Practice only provides an overview of the concepts being tested. There may be problems on the Test that are not included in the Test-Out Practice. Do NOT complete the other Module assignments.
- ❑ Some students find it very beneficial to complete ALL of the Notes for the sections in the Note Taking Guide up to the required Test Prep. This provides a more in-depth review of each topic to better prepare for Testing Out.
- ❑ If you cannot complete the prep activities quickly, then STOP the Test-Out attempt. Return to the required Notes and online assignments in order to stay on track and master the material.
- ❑ You are still required to meet the Drop Dead Dates listed on the course schedule, so you must successfully Test-Out or complete the notes and online coursework by the stated deadlines.
- ❑ **Requirement 3:** Pass the Test-Out for the Proctored Unit Test with a 75% or higher on the first attempt. **You only get 1 attempt to Test-Out**, so make certain you are fully prepared before you take the Test.
- ❑ If you do not earn a 75% or higher on the Proctored Unit Test-Out, then return to working in the Note Taking Guide and the online practice assignments in order to meet the next Drop Dead Date.
- ❑ Your Test-Out grade will count as your Proctored Test grade for that unit. You are welcome to re-take a passing Test-Out attempt (75% or higher) in order to earn a better score.
- ❑ If you successfully Test-Out, then move on to the next module. Your instructor will assign grades of 100% to all assignments covered by a passing Test-Out Grade.

*If you are attempting to Test-Out,  
Use these pages to Record the Test-Out Practice Problems*

**MAT 013B - Test-Out Practice Unit 1: M1**

**Date** \_\_\_\_\_

**Preparing for the Proctored Unit 1 Test-Out (Optional)**

If you are preparing for the Proctored Unit 1 Test-Out, then use the following blank pages to neatly copy each of the 25 problems on the Test-Out Practice Unit 1: M1 assignment.

**Number each problem, show all the necessary work for solving each problem, and clearly mark the correct solutions.**

**REMEMBER:** You will not be able to take the Proctored Unit 1 Test-Out unless these pages are complete and have been approved by your instructor!

You must also complete the **Test-Out Syllabus Quiz** prior to starting the Proctored Unit 1 Test-Out: M1.


*TEST-OUT PRACTICE CONTINUED*

The following Helpful Hint about Interval Notation is from pg. 146 of the Multimedia Textbook:

**Helpful Hint**

When writing an inequality in interval notation, it may be easier to graph the inequality first, then write it in interval notation. To help, think of the number line as approaching  $-\infty$  to the left and  $+\infty$  or  $\infty$  to the right. Then simply write the interval notation by following your shading from left to right.

Write Objective 1:

Watch the Objective 1 [Video Problem](#) by clicking on the icon  located after Objective 1 on pg. 145 of the Multimedia Textbook. Take notes from the Video as indicated in the boxes below.

Copy Notes from the Objective 1 Video about Graphing the Inequality: $x \leq -1$	Copy Notes from the Objective 1 Video about Graphing the Inequality: $x > 3$

**Write Objective 2:**

<b>Copy &amp; Solve the Example 2 Problem</b> From pg. 147 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 3 Video Problem</b> From pg. 148 of the Multimedia Textbook

<b>Copy &amp; Solve the Example 5 You Try It Problem</b> From pg. 149 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 8 You Try It Problem</b> From pg. 150 of the Multimedia Textbook



**Write Objective 3:**

<b>Copy &amp; Solve the Example 9 Problem</b> From pg. 151 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 10 You Try It Problem</b> From pg. 151 of the Multimedia Textbook

**Write Objective 4:**

<b>Copy &amp; Solve the Example 12 Problem</b> From pg. 152 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 13 You Try It Problem</b> From pg. 153 of the Multimedia Textbook

**Check Your Understanding:** Use the information presented in Section 2.8 of the Multimedia Textbook to match the following items about inequalities and interval notation. NOTE: Some choices will be used more than once. See the bottom of this page for a key.

\_\_\_\_\_  $<$  or  $>$  symbols

a) require square brackets for interval notation

\_\_\_\_\_  $\leq$  or  $\geq$  symbols

b) require round parenthesis for interval notation

\_\_\_\_\_  $-\infty$  or  $\infty$  symbols

c) Add or subtract a negative number to both sides of the inequality

\_\_\_\_\_ *Reverse the direction of the inequality sign*

d) Multiply or divide both sides of an inequality by a negative number

\_\_\_\_\_  $x \geq 5$

e)  $(-\infty, 5]$

\_\_\_\_\_  $x > 5$

f)  $(-\infty, 5)$

\_\_\_\_\_  $2x \leq 10$

g)  $(5, \infty)$

\_\_\_\_\_  $-2x < -10$

h)  $[5, \infty)$

\_\_\_\_\_  $5x < 25$

\_\_\_\_\_  $12 - x \leq 7$

**Key for Matching Activity**

**b, a, b, d, h, g, e, g, f, h**

*M1: Practice 2.8*

*Date:*

*M1: Practice 2.8 Cont.*

*Attach additional loose leaf paper as needed.*

Click on the M1: Tips for Success in Mathematics Assignment in MyLabsPlus and watch the assigned videos. Copy notes from each of the videos in the boxes below.

<b>Watch the Obj. 1 Video:</b> <i>Get Ready for This Course</i>	<b>Watch the Obj. 2 Video:</b> <i>Understand Some General Tips for Success</i>
Use this space to take Notes on the Obj. 1 Video.	Use this space to take Notes on the Obj. 2 Video.

**Watch the Obj. 6 Video: *Develop Good Time Management.***

Fill out the Schedule Grid on pg. 22, as described in the Objective 6 Video. In order to successfully complete MAT 012 in one semester, you must commit to a regular routine of working on MyLabsPlus beyond your scheduled class time. Develop a schedule for working, outside of class, on notes and homework problems. Be prepared to share your plan for success with your Instructor.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00 am							
7:00							
8:00							
9:00							
10:00							
11:00							
12:00 pm							
1:00							
2:00							
3:00							
4:00							
5:00							
6:00							
7:00							
8:00							
9:00							
10:00							
11:00							
12:00							
1:00 am to 5:00 am							

Now, assess your schedule. Will you be over extending yourself? You may need to adjust your class load, work load, social time, etc. to have enough hours in the week to succeed in MAT 012. Describe your plan for success below.

**Watch the Video: *How to Enter Answers Orientation.***

This video will demonstrate the various features of MyLabsPlus and help you learn the correct format for typing answers into the computer.

**After Watching the 4 Videos in this Assignment, Press OK to receive a 100% score.**

**Compound Inequalities****Helpful Hint for Understanding Inequalities**

- a) **AND** generally means to shade in between the two values on the number line.

$$x > -2 \text{ AND } x \leq 3 \quad \leftarrow \begin{array}{c} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \\ \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \\ \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \end{array} \rightarrow \text{Solution: } (-2, 3]$$

-2                      3

- b) **OR** generally means to shade one way or the other on the number line.

$$x < -2 \text{ OR } x \geq 3 \quad \begin{array}{c} \leftarrow \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \\ \leftarrow \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \\ \leftarrow \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} \end{array} \rightarrow \text{Solution: } (-\infty, -2) \cup [3, \infty)$$

-2                      3

**\*\* Omit Objective 1, pg. 552 \*\***

**Write Objective 2:**

Copy & Solve the Example 5 Video Problem From pg. 554 of the Multimedia Textbook	Copy & Solve the Example 4 You Try It Problem From pg. 554 of the Multimedia Textbook

**\*\* Omit Objective 3, pg. 555 \*\***

**Write Objective 4:**

<b>Copy &amp; Solve the Problem listed with Objective 4</b> Above Example 7 on pg. 555 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 7 Video Problem</b> From pg. 555 of the Multimedia Textbook
$x \leq 1 \quad \text{or} \quad x \geq 3$	

<b>Go to the 9.1 Exercise Set, on pg. 557.</b> <b>Click the You Try It icon to the LEFT of #19.</b>	<b>Go to the 9.1 Exercise Set, on pg. 557.</b> <b>Click the You Try It icon to the RIGHT of #39.</b>
This will open a Multimedia Textbook Exercise Set. Copy & Solve the <b>Exercise 23</b> Problem	This will open a Multimedia Textbook Exercise Set. Copy & Solve the <b>Exercise 41</b> Problem



**M1: Practice 9.1**

**Date:**

*M1: Practice 9.1 Cont.*

*Attach additional loose leaf paper as needed.*

**MAT 013B - M1: Notes for Practice 3.6**

**Date** \_\_\_\_\_

**Functions**

*Use this space to write summary notes for the section including steps, strategies and vocabulary to remember.*

---

**Write Objective 1:**

<b>Copy &amp; Solve the Example 1 Video Problem</b> From pg. 227 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 1 You Try It Problem</b> From pg. 227 of the Multimedia Textbook

**Write Objective 2:**



<b>Copy &amp; Solve the Example 2 Problems (a &amp; b)</b> From pg. 228 of the Multimedia Textbook	<b>Copy &amp; Solve the Practice 2 Problems (a &amp; b)</b> After Example 2 on pg. 228 of the Multimedia Textbook
	<p><i>Answers: a) Yes, it is a function because each x-value is assigned to only one y-value (none of the x-values repeat).</i></p> <p><i>b) No, it is not a function because the x-value of 1 is assigned to two different y-values (1, 2) and (1, 4).</i></p>

**Write Objective 3:**

<b>Copy &amp; Solve the Example 4 Problems (a, b, c &amp; d)</b> From pg. 229 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 4 You Try It Problem</b> From pg. 229 of the Multimedia Textbook

<b>Copy &amp; Solve the Example 5 Problems (a, b, c &amp; d)</b> From pg. 229 of the Multimedia Textbook	<b>Copy &amp; Solve the Practice 5 Problems (a, b, c &amp; d)</b> After Example 5 on pg. 229 of the Multimedia Textbook
	<p style="text-align: right;"><i>Answers: a, b &amp; c are Functions The graph of d is a vertical line so it is not a function</i></p>

**Write Objective 4:**

<p><b>Copy &amp; Solve the Example 7 Video Problem</b> From pg. 232 of the Multimedia Textbook</p>	<p>Go to the 3.6 Exercise Set, on pg. 236, and click the  icon to the Left of #69.</p> <p><b>Copy &amp; Solve the Exercise 69 Video Problem</b></p>
<p><math>f(x) = x^2 + 2</math></p> <p><math>f(-2) =</math></p>          <p><math>f(0) =</math></p>	
<p><math>f(3) =</math></p>	<p>Stay on pg. 236, and click the  icon to the Left of #74.</p> <p><b>Copy &amp; Solve the Exercise 74 Video Problem</b></p>

**Key for Sorting Activity, pg. 28**

**Functions:** b, c, f, h, i, j  
**Not Functions:** a, d, e, g, k, l

**Check Your Understanding:** Use the information presented in Section 3.5 of the Multimedia Textbook to sort the following items into the category of a Function or Not a Function. Write the correct letter choices for each category. See the bottom of pg. 27 for a key.

<b>Functions</b> List the items from below that are functions	<b>Not Functions</b> List the items from below that are not functions
--	--

a)  $\{(2, 5), (-3, 0), (-4, 7), (2, -1)\}$

b)  $\{(4, 4), (3, 5), (-1, 0), (5, -9)\}$

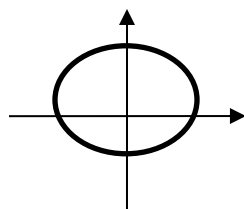
c)  $\{(-4, 1), (2, 9), (0, 7), (-6, -8)\}$

d)  $\{(2, 3), (2, 0), (2, -5), (2, -8)\}$

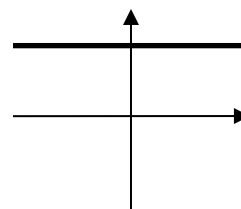
e)  $\{(0, -5), (4, 2), (0, -7), (1, -1)\}$

f)  $\{(-7, 5), (3, 5), (-4, 5), (0, 5)\}$

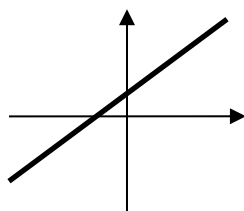
g)



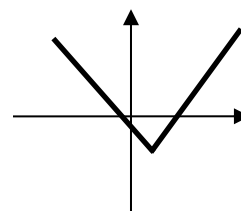
h)



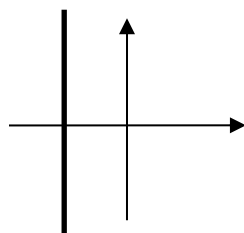
i)



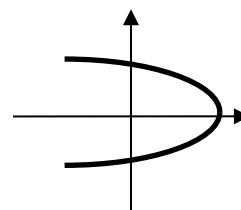
j)



k)



l)




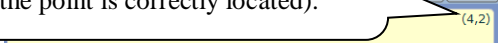
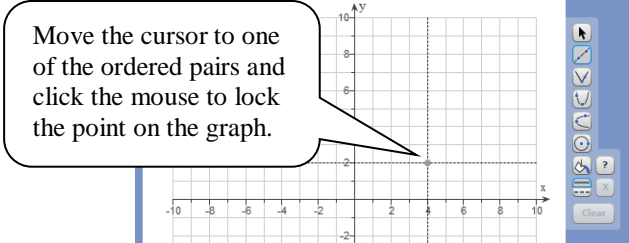
**\*\* Remember to ADD notebook paper after each section to record your Practice Problems. \*\***

**MAT 013B - M1: Notes for Section 8.1**

**Date** \_\_\_\_\_

**Graphing & Writing Linear Functions**

**Write Objective 1:**

<p><b>Copy &amp; Solve the Example 2 Video Problem</b> From pg. 512 of the Multimedia Textbook</p>	<p><b>Copy &amp; Solve the Example 2 You Try It Problem</b> From pg. 512 of the Multimedia Textbook</p>
	<p>HINT: To draw a graph on the computer, select the line graphing tool.</p>  <p>Notice that ordered pairs appear on the graph (use this feature to check that the point is correctly located).</p>  <p>Move the cursor to one of the ordered pairs and click the mouse to lock the point on the graph.</p>  <p>As you move the cursor to a second ordered pair the line will begin to appear on the screen. Click the mouse to lock in the second point and complete the graph of your line.</p> <p><b>NOTE:</b> You only need to use <b>2 points</b> to graph a line on the computer.</p>

## Formulas for Writing Equations of Lines

**Slope of a Line:**  $m = \frac{y_2 - y_1}{x_2 - x_1}$  where  $(x_1, y_1)$  and  $(x_2, y_2)$  are points on the line.

**Point-Slope Form:**  $y - y_1 = m(x - x_1)$  where  $m$  is the slope and  $(x_1, y_1)$  is a point on the line.

**Slope-Intercept Form:**  $y = mx + b$  where  $m$  is the slope and the y-intercept is  $(0, b)$ .

**Horizontal Line:**  $y = c$  where the slope is 0 and the y-intercept is  $(0, c)$ .

**Vertical Line:**  $x = c$  where the slope is undefined and the x-intercept is  $(c, 0)$ .

Write Objective 2:

<b>Copy &amp; Solve the Example 3 Problem</b> From pg. 512 of the Multimedia Textbook	<b>Copy &amp; Solve the Example 3 You Try It Problem</b> From pg. 512 of the Multimedia Textbook



**Objective 2 Continued:**

<p><b>Go to the 8.1 Exercise Set, on pg. 516, and click the <u>You Try It</u> icon to the RIGHT of #19. Copy &amp; Solve the Exercise 21 Problem</b></p>	<p><b>Click the Example 4 You Try It Problem, From pg. 513, and Select the <i>Help Me Solve This</i> Button from the Right Side of the Screen</b></p>
	<p>Copy the steps while working the <i>Help Me Solve This</i>.</p>

<p><b>Copy &amp; Solve the Example 5 Video Problem</b> From pg. 513 of the Multimedia Textbook</p>	<p><b>Copy &amp; Solve the Practice 5 Problem</b> After Example 5 on pg. 513 of the Multimedia Textbook</p>
	<p><i>Answer: <math>f(x) = -2</math></i></p>

**Objective 2 Continued:**

Go to the 8.1 Exercise Set, on pg. 518, and click the You Try It icon to the LEFT of #79. Copy & Solve the Exercise 79 Problem. Show all the steps for setting up and solving the word problem.

[Empty box for student work]

**\*\* Omit Objective 3, pg. 514 \*\***

**\* \* Remember to ADD notebook paper after each section to record your Practice Problems. \* \***

**\*\*\*\*\***

**In order to finish Mod 1, and the remaining Units in MAT 013B, you must purchase a MAT 013B Note-Taking Guide from the College Bookstore.**

**Remember to ADD these notes to the Note Taking Guide purchased from the Bookstore.**

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