



TabletClass Math System

Proven, Powerful and Perfect for Homeschoolers!



"I'd like to thank you, John Zimmerman, for creating TabletClass. Doing math used to be the most stressful part of our homeschooling day. Now that our son is using TabletClass, instead of a "battle of the wills," there is peace.

Thanks again for creating TabletClass!"

-Santee, SC

This guide will show each step in the TabletClass Math Homeschool education process to include:

1. Course Organization, Materials and Duration
2. Getting Prepared to Start (MUST READ)
4. Instruction, Routine and Pacing
5. Practice Worksheets Problems
6. Tracking Understanding and Managing Strengths and Weaknesses
7. Mobile learning
8. Chapter notes
9. Testing
10. Grades

Extras:

- * Avoiding Common Mistakes and Instilling Good Habits
- * How Your Child Learns

TabletClass Math Homeschool Guide



1. Course Organization, Materials and Duration

Organization: TabletClass Math courses are organized to make learning very easy and intuitive. Families don't need to spend extra for a textbook or workbook since all course documents come with the program and are online. The TabletClass course curriculum is designed to fit a traditional textbook approach (chapters/sections). As such most students feel very comfortable with the TabletClass navigation because the format is familiar and logical. Our lessons are laid out in a very specific sequence so students want to start with the first chapter and watch the videos in order.

Note: Skipping over material is NOT recommended; however going back to review previous material is STRONGLY encouraged.

Materials: having access to a computer and high speed internet is the most basic requirement for the course. The ability to print documents is nice but not absolutely required in order to have a successful course experience. Parents can further enhance the course by adding the following materials:

- * Ability to Print (Chapter Tests and Notes)
- * Scientific calculator (an expensive graphing calculator is not required, but it's a good investment.)
- * Graph paper, protractor
- * Three ring binder for notes and course work

Duration: Each TabletClass course has over 100 hours of video instruction- that's a lot to cover! We suggest giving your child a full academic year (7 - 10 months) to finish. When creating a long term schedule a good approach is to plan to spend an equal amount of time in each chapter. Parents can adjust the pacing of the course through the year depending on how well their child is progressing through the material.

2. Getting Prepared to Start (MUST READ)

It's imperative that students and parents fully understand all the features of the TabletClass Math learning system before starting instruction. Students run the risk of not taking advantage of important and powerful learning benefits if they don't first invest a few minutes learning how our educational management system works. Reading this guide is an excellent start, however students and parents should watch the DEMO video located in the "Start Here" chapter and click through the tutorial tabs in the course navigator as well. Only after the parent and student have a complete understanding of the system should actual course work begin.

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3. Instruction, Routine and Pacing

Instruction: Parents and students can feel extremely confident that TabletClass instruction is comprehensive and highly effective. Moreover, TabletClass videos are not short tutorials rather all videos explain concepts and skills fully and step by step. All TabletClass video instruction is taught by John Zimmerman. John is a certified teacher with a BA in Mathematics and Masters in Education. More importantly John has years of experience working with students of all grade levels and abilities (to include special needs). John loves teaching and knows how to connect with students—teaching them in a way they will understand and like.

Routine/Pacing: We strongly suggest that you follow the recommended learning approach and routine until you are comfortable with the TabletClass system. Once you get going and understand the program, feel free to make modifications that make the course most effective for you and your child.

Instructional Routine:

- * At best you can establish a regular learning time 5 days/week
- * Allow 1-2 hrs total learning time per day; this includes watching a lesson and finishing practice problems. (If limited on time 30-45 minutes would be adequate.)
- * Make sure the environment is quiet with minimal distraction (use headphones if needed)
- * Have a notebook and pencil ready to take notes
- * Close all other software programs except Internet Explorer (strongly recommended).
- * Start with the section lesson videos. Upon the completion of every video ensure your child updates their Student Journal (see tracking understanding).

Instructional Routine (Continued):

* After the student feels comfortable with the lesson material they can move onto the associated practice problems for that section. The practice problems are grouped in examples sets. The example set problems can be found by clicking on the magnifying glass icon located next to the section name (image on next page). To watch the solutions to the example set problems click on the respective "Example Set" video. Complete the example set problems in order, and always update the "Student Journal" when viewing video solutions.

* Once an entire chapter is completed, students are strongly encouraged to use the "My Pulse" feature to review any weak areas needed to improve. Reviewing weak areas and improving is critical before taking a test or moving on to the next chapter.

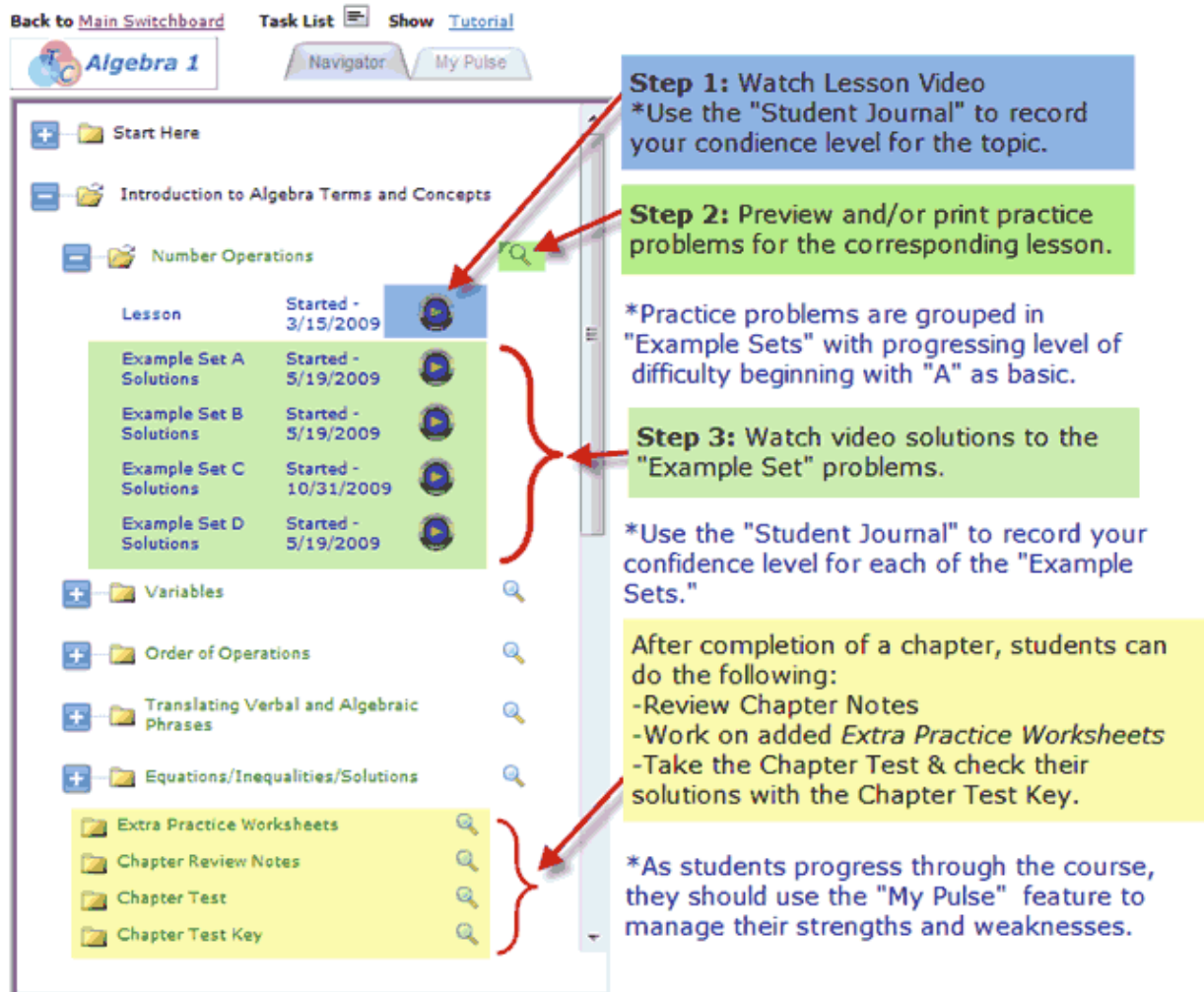
Note: *Parents and students need to keep in mind that the course builds on previous lessons, so correcting weak areas before moving forward is vital for success.*

* Students should study their chapter notes before taking a test (they should use their notes and the notes provided at the end of each chapter).

* At the end of each chapter all students should take the chapter test. Use the answer key to determine a raw score and the results to identify areas to improve.

* As a general guideline students should try to finish one section (lesson and example sets) every 1-2 days. However, students should expect that some of the more challenging sections will take longer.

General Learning Steps/ Course Organization



The screenshot shows the TabletClass Algebra 1 course interface. At the top, there are navigation links: "Back to Main Switchboard", "Task List", and "Show Tutorial". Below these are "Navigator" and "My Pulse" buttons. The main content area is a tree view of course materials:

- Start Here
- Introduction to Algebra Terms and Concepts
- Number Operations
 - Lesson (Started - 3/15/2009)
 - Example Set A Solutions (Started - 5/19/2009)
 - Example Set B Solutions (Started - 5/19/2009)
 - Example Set C Solutions (Started - 10/31/2009)
 - Example Set D Solutions (Started - 5/19/2009)
- Variables
- Order of Operations
- Translating Verbal and Algebraic Phrases
- Equations/Inequalities/Solutions
 - Extra Practice Worksheets
 - Chapter Review Notes
 - Chapter Test
 - Chapter Test Key

Annotations and learning steps:

- Step 1: Watch Lesson Video**
*Use the "Student Journal" to record your confidence level for the topic.
- Step 2: Preview and/or print practice problems for the corresponding lesson.**
*Practice problems are grouped in "Example Sets" with progressing level of difficulty beginning with "A" as basic.
- Step 3: Watch video solutions to the "Example Set" problems.**
*Use the "Student Journal" to record your confidence level for each of the "Example Sets."

After completion of a chapter, students can do the following:

- Review Chapter Notes
- Work on added *Extra Practice Worksheets*
- Take the Chapter Test & check their solutions with the Chapter Test Key.

*As students progress through the course, they should use the "My Pulse" feature to manage their strengths and weaknesses.

Video Player/ Student Journal

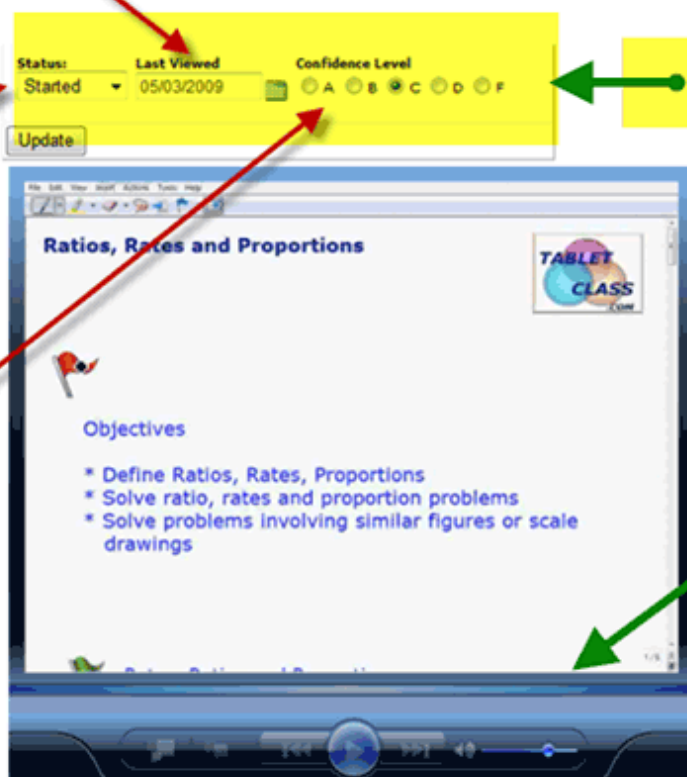
Last Viewed
Change date as required.

Status
Started - Default Status
Re-visit - Your marker to review the video again.
Complete - You don't feel you need to re-visit the video.

Confidence Level
This is a self assessment designed for you to keep track of your skill level (see My Pulse). We recommend using the following criteria:
A: You can do all problems with no help
B: You can do most problems, but have trouble with a few.
C: You have some level of understanding, but find the problems hard to do.
D: You're struggling with the topic
F: Lost

Student Journal

Controls for Video Player

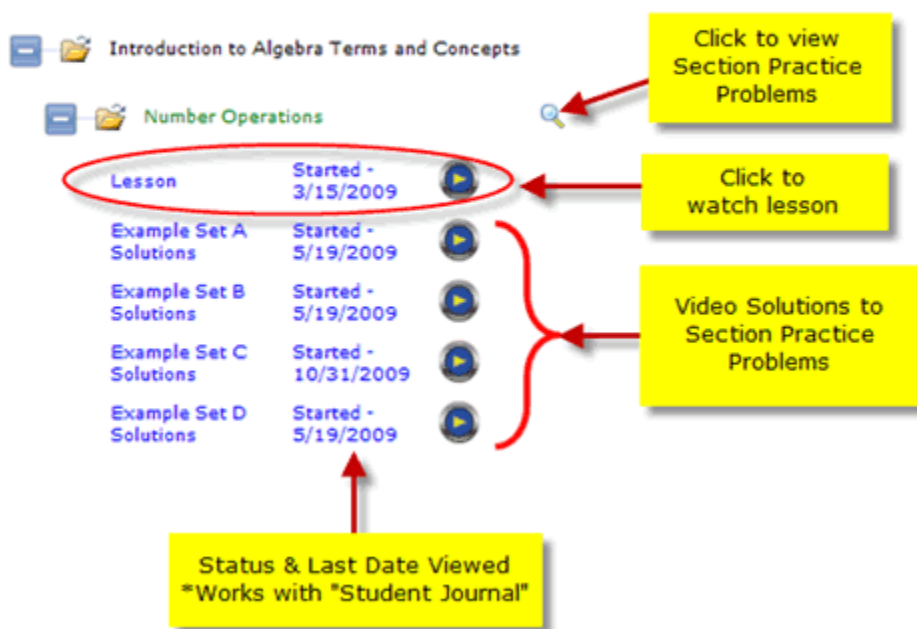


4. Practice Worksheet Problems

Practice is a must when mastering the skills of mathematics. Sometimes students will watch a lesson and understand the concepts quickly—this is great if it does not lead to over confidence and to the belief that practice is not needed. The problems in the example sets have been designed to practice the variety of applications that the lesson taught. It's important that you schedule enough time for your child to finish all the problems in the example sets for the section.

Upon completion of the section lesson video students should proceed to the respective example sets in the sections for practice. To view or print the problems click on the magnifying glass icon next to the section name. The student should work on the first set of problems (Example Set A) and watch the respective solution video (Example Set A Solutions) to check for understanding. It's important that the student show all their work and model the process of writing out all the steps as illustrated in the video. If the student is having difficulty, refer to the notes or watch the lesson video again. Next, move on to the second example set problems, "Example Set B"—and repeat the same process as above. Move onto the next section in the chapter only after all example set problems have been completed and weak areas improved.

Opening Practice Problem Example Sets & Watching Video Solutions



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5. Tracking Understanding and Managing Strengths & Weaknesses

Knowing what areas a student is weak in is the first step toward improvement. By using the “Student Journal” and “My Pulse” features students can easily track their understanding and know exactly what areas they need to improve. However, to make this powerful feature effective, students must record their level of understanding in the Student Journal (located next to the video player) every time they watch a video. The result from doing so will allow the student to generate a very specific report (using the My Pulse feature) that will allow them to identify their self-reported strengths and weaknesses.

The screenshot shows the 'My Pulse' feature in the TabletClass interface. At the top, there are navigation links: 'Back to Main Switchboard', 'Task List', and 'Show Tutorial'. Below these is the 'Algebra 1' header and a 'Navigator' button. The 'My Pulse' button is highlighted in yellow. A dropdown menu shows the confidence level 'C'. Below this is a table of video information with columns for 'Video Info', 'Details', and 'Play Video'. Red arrows point to the 'My Pulse' button, the confidence level dropdown, a play button, and a 'Details' link. Callout boxes provide instructions for each: 'Click to display Course Navigator', 'Click to select/change the confidence level filter', 'Click to play video you want to revisit', and 'Details: Video Status, Confidence Level & Last Date Viewed'.

Video Info	Details	Play Video
Introduction to Algebra Terms and Concepts Number Operations Worksheet A	Started C 5/19/2009	
Introduction to Algebra Terms and Concepts Number Operations Worksheet B	Started C 5/19/2009	
Introduction to Algebra Terms and Concepts Number Operations Worksheet C	Started C 10/31/2009	
Introduction to Algebra Terms and Concepts Number Operations Worksheet D	Started C 5/19/2009	
Introduction to Algebra Terms and Concepts Variables Lesson	Started C 5/19/2009	
Introduction to Algebra Terms and Concepts Variables Worksheet A	Started C 3/17/2009	

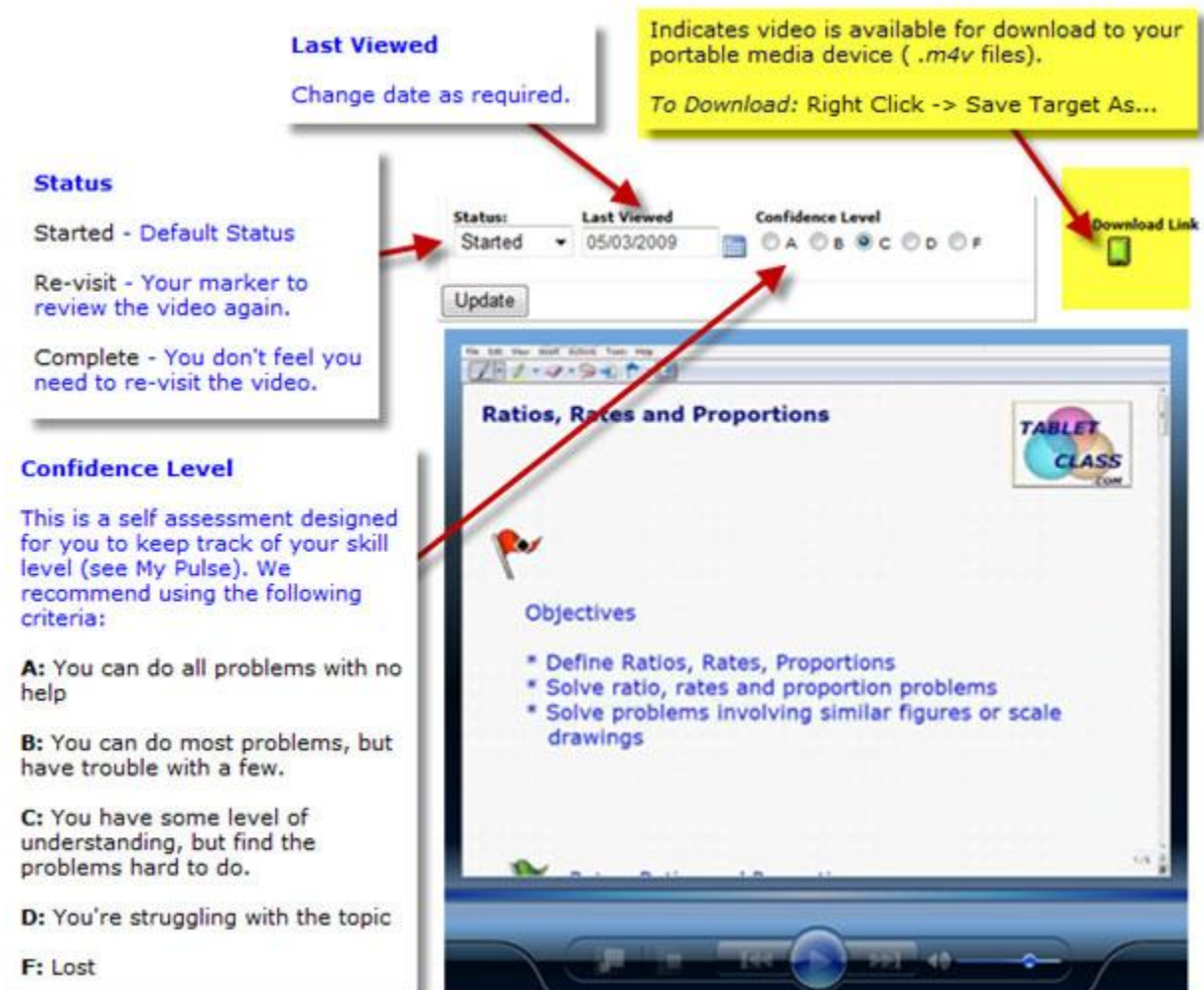
6. Mobile learning

Many parents and students have very tough and demanding schedules, so the ability to download math lessons and learn anywhere is a great benefit for TabletClass members. All lesson videos can be downloaded to mobile devices that play a .m4v video. TabletClass videos are specifically designed to be viewed on smaller devices with sharp and clear resolution. Examples of mobile devices that support this file format are iPods, iPhones, Droid cell phone, PSP, Zune and others.

Note: only the section lesson videos can be downloaded not the practice problem videos.

How to download a mobile video:

- * Download the file to your computer desktop (see image)
- * Transfer file onto your mobile device—it's that easy!



Last Viewed
Change date as required.

Status
Started - Default Status
Re-visit - Your marker to review the video again.
Complete - You don't feel you need to re-visit the video.

Confidence Level
This is a self assessment designed for you to keep track of your skill level (see My Pulse). We recommend using the following criteria:
A: You can do all problems with no help
B: You can do most problems, but have trouble with a few.
C: You have some level of understanding, but find the problems hard to do.
D: You're struggling with the topic
F: Lost

Indicates video is available for download to your portable media device (.m4v files).
To Download: Right Click -> Save Target As...

Download Link

Ratios, Rates and Proportions

Objectives

- * Define Ratios, Rates, Proportions
- * Solve ratio, rates and proportion problems
- * Solve problems involving similar figures or scale drawings



7. Chapter notes

We know that many students find note taking a struggle. To ensure students have a good set of notes we provide chapter review notes (located at the end of each chapter). You should print the chapter review notes to supplement the notes taken during the lesson. Although some students may not like noting taking, it's an important skill they will need to master for future academic success.

8. Testing

Chapter tests and keys are located at the end of each chapter. Use the answer key to determine a raw score however the most important use from a test is to determine what areas the student needs to go back and review. When grading a test for a score, you should look for areas where you can award partial credit. If a student has a wrong answer because of a simple mistake but shows clear understanding of the process and concepts partial credit can be given. It should be noted that you always want students to show all of their work, answers without supporting evidence of understanding should not be viewed favorably. Moreover, all errors should be corrected and weak areas reviewed. Course material builds on itself so students should expect that they will face similar problems in the future. Lastly, parents should stress the importance of neatness, showing work and time management, when reviewing test results with their child.

9. Grades

TabletClass Math does not calculate a final grade for course work. However, parents can use the TabletClass features along with this suggested guideline to help them determine a fair grade for their child.

Course Grade Guidelines:

- * Completion of all course videos: 50%
- * Average of all chapter tests: 30%
- * Taking neat and comprehensive notes: 10%
- * Self-initiative and improvement: 10%

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9. Grades (Continued)

The total percentage of the course grade categories (shown on previous page) would be student's grade. Use the scale below for a recommended letter grade based on the above percentage.

Letter Grade/Percentage Scale:

A+	(97% - 100%)
A	(92% - 96%)
A-	(90% - 91%)
B+	(87% - 88%)
B	(83% - 86%)
B-	(80% - 82%)
C+	(77% - 78%)
C	(73% - 76%)
C-	(70% - 72%)
D	(60% - 69%)

59% or below not passed course/ incomplete

* Additional Guidance: Parents can use the "My Stats" tab (located next to start tab) to get a general "feel" of a student's progress. It is very important that parents and students don't confuse this data as a grade. However the "My Stats" feature is a great summary of all videos watched along with an average percentage based on the confidence levels assigned in the Student Journal(A=5, B=4, C=3, D=1,F=0).

The image shows two screenshots from the TabletClass interface. The left screenshot shows the "My Courses" section for "Pre-Algebra" with a "Stats" button highlighted in yellow and a red arrow pointing to it with the label "Stats Button". The right screenshot shows the "PROGRESS STATISTICS/TRACKER" page for "Number Operations" with a 72.0% completion rate and a list of lessons and solutions.

Lesson	Status
Lesson	Started - B - 3/15/2009
Example Set A Solutions	Started - B - 3/15/2009
Example Set B Solutions	Started - B - 3/15/2009
Example Set C Solutions	Started - C - 5/19/2009
Example Set D Solutions	Started - C - 5/19/2009

Helpful Bonus Material:

Avoiding Common Mistakes and Instilling Good Habits (by John Zimmerman)

Experience is the best teacher. As such I want to share with you lessons that I have learned over the years when it comes to teaching young people mathematics. Knowing what to look for in your child's math work can help you encourage good habits and correct common problems.

Areas to pay special attention to:

Fractions: many young people have trouble with fractions. It's an absolute must that your child understands fractions and their respective operations. Often students ignore fractions because they have a calculator—don't fall into this trap! If you're weak in fractions you will have a difficult time with algebra and beyond.

Integers: students that have not mastered working with positive and negative numbers will have a very difficult time in middle and high school math. Once again, don't let your child rely on a calculator...they must know and memorized the rules of integers.

Order of Operations: often, many students have a false sense of security that they are following the proper order of operations when simplifying a numeric expression. Weakness in this area if not corrected early will undermine success in mathematics. So, please ensure that your child understands and thoroughly practices the order of operations, also known as PEMDAS (Please Excuse My Dear Aunt Sally).

Distributive Property: many students tend to make distributive property errors especially when solving equations. If you see a pattern of your child not correctly applying the distributive property it is imperative that you go back and review the distributive property section until the skill is mastered.

Neatness: Mathematics is a language. To clearly understand what we are saying in math it's vital that we write out steps in a neat and orderly manner. Again, students tend to get over confident in thinking that writing out each step is a waste of time, only to find out that they made an error that could have been caught if they had carefully written out the steps (I called this the, "I knew that" mistake). To instill neatness and logic in problem solving, have students model their work to the steps shown in the videos.

Pencil not pen: no one writes out all the steps in math perfectly the first time so students must be prepared to erase mistakes. This seems obvious, but many students like to work in pen and their work gets messy fast; if your child likes using a pen insist on using a pencil.

Enough space: another tendency students have is that they like to conserve space on their paper while working on problems. This noble conservation unfortunately leads to crowded work that does not show all the steps of a problem solving process. Avoid this tendency by encouraging your child to use whatever amount of paper it takes to show all the steps. Also, if your child writes very small try to encourage them to write a bit larger so they can see all their work clearly.

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Understanding How Your Child Learns

Take advantage of the fact that no one knows your child better than you, the parent. One of the most important traits you want to know about your child is their learning style. A learning style is nothing more than the learning process your child prefers or responds to best. For example, your child may prefer to learn in a step-by-step concrete manner or they may like to jump into a problem and try to figure it out. The great benefit of using TabletClass is that our system is highly adaptable to all learning styles. We specifically designed our program to give individuals maximum control over their learning environment, pacing and style of learning resulting in an enjoyable experience for all students.

Another facet of your child's learning that is important to discover is their primary intelligences. In teaching, this concept is called "multiple intelligences." These MI are the areas that your child shows exceptional talent, skill or knowledge. You as the parent want to align learning activities to your child's learning style and multiple intelligences. A great resource to help you with these concepts is the book, "How the Brain Learns" from David A. Sousa.