"Why spending more than \$15 on a high school mathematics textbook is

WORSE THAN A WASTE OF MONEY."

First, would you agree that the ...

Five Essential Ingredients of a Successful Mathematics Education are:

- 1. **Self-Pacing**. Students must be taught at a pace they can absorb the new material and review past material. Each student is unique and his or her pace will vary from time to time and topic to topic.
- 2. **Proper content**. It is vital that a student be ready for a new topic. Learning math is like climbing a ladder. Do not try to skip rungs. Also, the content should be relevant to the student's broader interests in life.
- 3. **Interactivity**. The student must learn math by "doing math". Math is like any sport. You must practice and get continual feedback. You must accept that mistakes are natural and you learn from them. Mistakes are actually a good sign you are practicing and learning and should be "celebrated" as a sign of progress.
- 4. **Keeping Score**. The student should be given continual evaluation and praise for his or her progress. However, a student is striving for his or her own progress, and NOT competing with other students. Focus on the student's achievements and progress.
- 5. **Empathy and humor**. It is vital that the student learn to enjoy "doing math". Laugh at mistakes as a normal thing that happens to us all. Receive continual praise for both effort and success.

Do we agree on this? If yes, read on . . .

For many reasons, modern middle and high school mathematics textbooks, and their derivative programs like CD's, DVD's, online programs, make it impossible for any teacher to deliver these essential ingredients to a student. There are many reasons, but CONTENT is the number one problem.

The content of the modern Standard Mathematics Curriculum (SMC) simply contains much material that is premature for a beginning student, and irrelevant for 99% of all high school students.

View a 12 minute video of a math teacher, Jon Bennett, who confesses and explains this very well at a TED talk. http://www.youtube.com/watch?v=xyowJZxrtbg

He is fundamentally correct. However, Mr. Bennett fails to provide an adequate solution. And there is one.

You may learn all about what is an appropriate modern solution to this seemingly intractable problem at www.TriadMathInc.com

Now for the \$15 question.

Is there a high school math textbook that, in the hands of a good math teacher, can meet the Five Essential Ingredients criteria?

Yes, there is. It's author was a great math teacher, Dr. George Simmons.

You may learn all about **Precalculus Mathematics in a Nutshell: Geometry, Algebra, Trigonometry:** and buy it for only about \$15 at Amazon: http://www.amazon.com/Precalculus-Mathematics-Nutshell-Geometry-Trigonometry/dp/1592441300

You will not need to buy another precalculus math textbook. You will probably be surprised to learn this book is only 119 pages, and contains virtually everything needed for precalculus.

We use this book in our Tiers 3 and 4, of our math program. For details visit: www.TriadMathInc.com In Tier 4 we do include additional material that is not available in appropriate form in any high school

textbook we know of. This is discussed in detail in our book *Teaching Math*.

We do use custom notes and exercises in Tiers 1 and 2, we call the Practical Math Foundation (PMF) since Dr. Simmon's book contains much content that is premature and inappropriate for beginning math students.

Plus, a beginning student should, or I believe must, be taught how to use their first "power tool" for modern mathematics, the scientific calculator.

For details, http://www.triadmathinc.com/the-foundation-course/

There are several other reasons the SMC fails to meet the five essential ingredients tests that are discussed in *Teaching Math*.