

LOGIC

MATH TIPS

Strive to pass on a positive attitude about math to your children.

Redeem your math education. By closely following the math of your eldest child, you can relearn while (s)he learns. You will then have a much easier time teaching math with subsequent children.

Encourage students to write down all the steps as they work through problems. Many students who have always been good at math may start to have difficulty at this point for two reasons. First, they are often in the habit of doing math mostly in their heads. Now they will begin to encounter multi-step problems and will lose track of the steps if they do not write them down. Second, the number of steps leads to more opportunities for careless errors to occur.

Teach your student to complete only a few problems on each page of paper. Have student draw two perpendicular lines to divide the lined or graph paper into four quadrants for four problems. It may seem like a lot of wasted space now, but it is a habit that will pay off as the number of steps increases in higher math.

Show your student how to use the table of contents, index, and glossary to look up concepts previously learned.

Have your student orally explain problems to you to detect confusion. If you have a conversation, you will be able to see and hear what he or she does or does not understand by asking the five common topic questions.

Take a break if you are sensing frustration from your child as he or she wrestles with a concept. Come back to it later and try again.

Have your student memorize the multiplication tables through the 15s, the squares, and the cubes to allow the student the freedom to concentrate on learning the math concepts (dialectic) rather than learning the math facts (grammar). For assistance in memorizing all the tables needed for all of algebra, we recommend *Tables, Squares & Cubes*. Students may also benefit from *Trivium Tables®: Math* to reference formulas, conversations, operations, and laws. These can both be purchased from www.ClassicalConversations-Books.com.

Tailoring

Completing each Saxon *Math 8/7* problem is essential to mastery of the material. Concepts are continually practiced in each lesson. When students skip problems, they will miss the opportunity to continue to practice various concepts. See the introduction in the front of the Saxon Math books for more information. In addition, students should complete all the Saxon *Math 8/7* investigations. They are usually experiential lessons that if skipped will hinder the students' learning because the concepts appear throughout Saxon *Math 8/7* and later textbooks.

When families have time for more:

- Reassign a homework lesson requiring the student to work each problem in a different way than it was originally completed.
- Using the webinar "Cultivating Classical Parents: Middle School Math" as a guide, assign one or two problems from each lesson to be worked out while thinking about numbers, laws, and operations.
- Have your student create and work out four or five new math problems about each lesson's content.

When families have a busy week:

- Assign three math lessons instead of four.
- Count a test or investigation as a math lesson for that week.

AT HOME

- Daily: Read lesson.
- Daily: Complete, check, and correct lesson.
- Take tests. The *Challenge A Guide* suggests a test nearly biweekly unless an Investigation falls within that schedule. Saxon *Math 8/7* has written a test for each week. The teaching parent decides the testing schedule for his or her home school.
- Complete Investigations as they appear in the text.
- Choose two problems to bring to class.

IN COMMUNITY

- Introduce new concepts by asking the students what they already know about the topic (“What do you see?”), using the five common topics questions, and/or comparing two problems of the same type.
- Model concepts and skills using the following steps: (1) explain the concept and process while demonstrating the concept/skill at least twice, 2) ask students to compare the examples, 3) ask students to explain what they have observed, 4) provide another example if students are unable to explain accurately the concept/skill.
- Practice math by making up original problems or playing “Beat the Director” with math facts or simple problems.
- Discuss math by defining vocabulary or using *Trivium Tables®: Math* to write numbers in multiple forms.
- Answer questions students bring to seminar.

BEGIN THE CONVERSATION

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INVENTION:
5 COMMON TOPICS



LOGIC

ABOUT SAXON MATH

Saxon Math is an excellent curriculum that incrementally introduces mathematical concepts with a clear and self-teaching approach. It is a solid math course for homeschooling families when the teaching parent needs to learn or review concepts along with their children. The review of previous concepts is sprinkled into each lesson, building mastery in the diligent student. The content spine K–12 is complete, rigorous, and good preparation for the college-bound student.

For more information, visit the Saxon Math website at:

<http://www.hmhco.com/homeschool/math>

How do I know at which Saxon level to place my child for work at home?

Visit the website to find placement tests, textbook corrections, and other resources!

<http://www.hmhco.com/shop/education-curriculum/math/homeschool/saxon-math-homeschool/resources>

Can my student still participate in the math seminar if he or she is not in the same level or book as is being tutored?

Students will benefit from participating in a dialectic math seminar whether or not the concepts are introduced in the same order as their own math textbook. Concepts discussed in seminar will review, preview, or incorporate concepts the students are studying at home.

Should a student complete every math problem in each lesson?

Completing each problem is essential to mastery of the material. Concepts are continually practiced in each lesson. When students skip problems, they will

miss the opportunity to continue to practice various concepts. See the introduction in the front of the Saxon Math books for more information.

Should a student complete the Saxon *Math 8/7 Investigations*?

Students should complete all the investigations; they are usually experiential lessons that if skipped will hinder the students' learning because the concepts appear throughout Saxon *Math 8/7* and later textbooks.

What resources are available to aid me in teaching the Saxon curriculum?

To complement Saxon Math, Teaching Tape Technology produces an excellent DVD series for Saxon Math levels 5/4 and above, which is available for purchase from the Classical Conversations Bookstore. Teaching Tape Technology is not affiliated with Saxon/Houghton Mifflin Harcourt Publishers.

For more information, visit the Saxon Math website at:

http://saxonhomeschool.hmhco.com/en/homeschool_faq.htm