

PARENT GUIDE 

# AGS Mathematics

Pre-Algebra | Algebra | Algebra II | Geometry

Homeschool bundle includes:

- Student Edition
- Student Workbook
- Teacher Edition



# Because You Know What Matters Most



Thank you for choosing Pearson to help you on your homeschool journey. Making the right decision about homeschooling can set your child on an exciting path to a lifetime of learning and success. Pearson makes it easy for you to inspire a joy of learning with flexible programs to fit your child's unique learning style. This built-in flexibility lets you set the schedule and the pace that works for you and your child. As you read through this guide and review the included materials, you'll experience how easy it is to personalize the curriculum to match your child's learning style and ensure success with our engaging programs.

Plus, you can rest assured that all of the fundamentals for success are included. The homeschool curriculum you have chosen has been thoughtfully developed and tested by seasoned professionals, to make sure your child receives the finest education.

## Welcome to Pearson Homeschool!

# Preparation

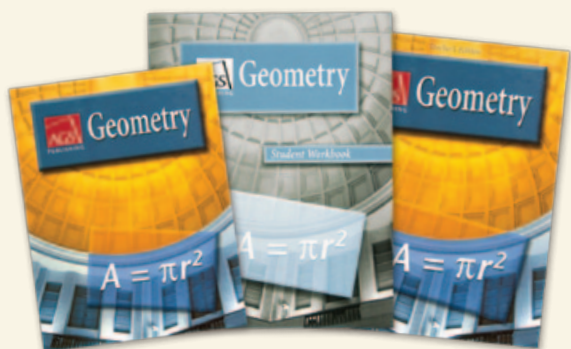
It is always an exciting time when you get to open the box with your new curriculum. All of the books and materials are colorful, the pages are crisp and they are filled with the possibilities of the coming year. The anticipation of using the books and teaching your child is new and fresh. Like the air after a spring shower, it is invigorating. You can't wait until you can get started.

Open the bundle of materials, flip through the pages of each book, take in how they look and feel. Get familiar with all of the components. Let your child share in the excitement and catch the enthusiasm you have for starting this new adventure. These will be your companions over the course of the next year.

Once you get familiar with the material, you may experience the overwhelming feeling that is common to homeschool parents: "How will I ever cover all of this material?" You may be flooded with insecurities that you don't know or remember the subject or content. All of these are normal thoughts and experiences for anyone who has homeschooled.

Remember the value of the journey you are on. Focus on the reasons you chose to homeschool in the first place, the daily interaction with your child, and teaching them how to learn. As the tutor, you as the parent don't have to know all of the material. It's fine to learn it with your child as you go through the material together. You are the guide for your child as you journey with them through the learning process.



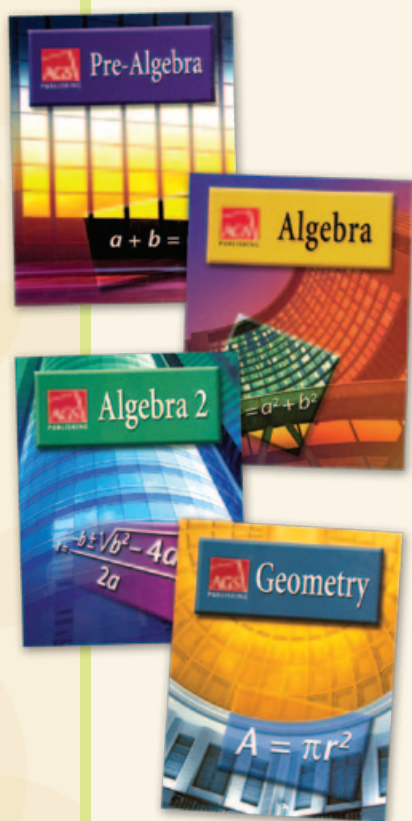


## Overview

The *AGS Mathematics* homeschool bundle includes the following components:

- Student Edition
- Student Workbook
- Teacher Edition

*AGS Pre-Algebra*, *AGS Algebra*, *AGS Algebra 2* and *AGS Geometry* present the concepts of algebra and geometry in an accessible, friendly format to provide your child with the tools, and the confidence they need to reach new levels of understanding in mathematics.



**Pre-Algebra** is a comprehensive program designed to help your child build important skills and confidence, prior to taking Algebra. Through the step-by-step examples and frequent practice exercises, your child will develop competencies in new skills to guide them through Algebra.

**Algebra I** presents the concepts and skills your child will need to succeed in a first-year algebra course. The content provides children of all abilities with essential preparation in problem solving, calculator usage, and application lessons that demonstrate how algebra is integrated with related content areas - such as geometry, probability, and statistics.

**Algebra II** takes instruction a step further and covers several methods for solving quadratic equations, such as factoring, completing the square, and graphing. This program also introduces trigonometry and exponential functions—vital concepts for real world applications. Filled with full-color illustrations and examples throughout, Algebra II motivates students to learn.

**Geometry** moves beyond the basics and explores geometric solids, triangles, the Pythagorean Theorem, quadratic equations, length, area, and volume. Throughout the course, Geometry presents short, lively lessons students can grasp easily.

## Using the Materials

Pearson curriculum materials are thoughtfully planned to present the subject in a way that is engaging. Each lesson builds upon itself, but provides flexibility so you can make it your own.



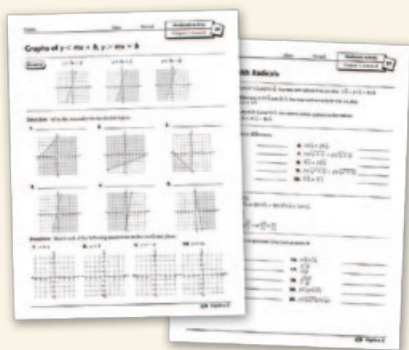
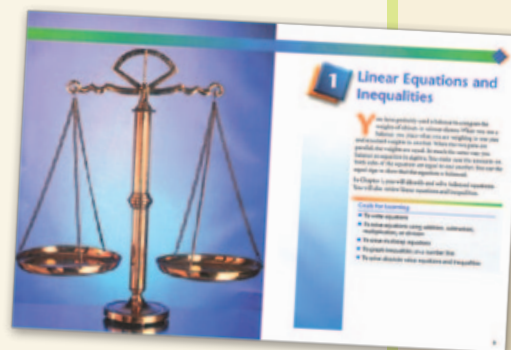
### Using the Student Edition

Each *Student Edition* begins with a How To Use This Book section. Review this information to become familiar with the content. There are many features built into the daily lessons to help your child learn the important skills and concepts he or she will need to be successful in this course.

These features include:

- *How to Study* – Tips to help your child study more effectively.
- *Before Beginning Each Chapter* – Skills and concepts that will be covered throughout the chapter.
- *Chapter Features* – A variety of helpful information and exercises that support the lesson.
- *Problem Solving Strategies* – Strategies to help you use math to solve everyday problems.

Each chapter breaks lessons into small, manageable sections with several exercises to apply the lesson's skills. Chapters end with a review to allow you to assess your child's progress. The end of the text includes supplementary problems that support each chapter to provide extra practice for your child, if needed. Additionally, answers and solutions can be found at the end of the book for selected problems. Finally, there is a skill review section that summarizes the skills presented throughout the course.

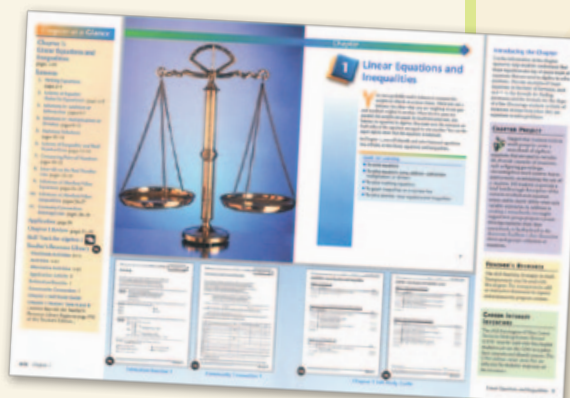


### Using the Student Workbook

Each *Student Workbook* aligns with the Student Edition to reinforce your child's knowledge, skills and comprehension of the material covered. Each lesson from the *Student Workbook* has a review for your child to assess their understanding of the lesson. An additional, comprehensive review is available at the end of the unit.

### Using the Teacher Edition

Each *Teacher's Edition* includes a planning guide for each chapter. This is followed by the daily lesson plans that present the instruction notes in the margins around a reduced version of the *Student Edition*, annotated with the answers. Each lesson follows a consistent approach, presenting the overview and objectives of the lesson first before leading into the lesson highlighting tips, and ways to reinforce and extend lessons. The corresponding *Student Workbook* pages are shown underneath the reduced student pages, to identify when to assign the practice activities. The end of the book includes the answers to all of the supplementary problems.



# Lesson Plans

Lesson plans are important to a successful homeschool environment. They help keep you on track, progress through the material and provide a steady structure for teaching your child. It is important to plan out your lessons but remember - lesson plans are a guide. You should leave room to adapt to your child and adjust the plan to ensure he or she understands the material. The objective is to have a tool you can use to watch your child progress and master the material you present over the course.

Before you begin your lesson plan, review the materials to see how they are structured. Use this as a guide to help you evaluate and formulate your lesson plan for the coming year. Additionally, there are a number of items to consider when preparing your plan. How many days per week will you have school? Do you plan to have extended breaks for the holidays or vacations? The number of children you have and their ages will affect how and what you can do as well.

Lesson plans in general should have certain vital components. A suggested list would include some or all of the following:

- the portion of text covered during the lesson
- key concepts
- activities to do
- assignments given
- main ideas of the lesson
- questions to ask
- potential field trip ideas
- materials and resources needed

Each program within the *AGS Mathematics Series* is presented across 12-13 chapters that cover about 30 weeks. This pacing assumes one lesson per day, plus additional time for topic assessment and review. Additionally, there are several opportunities to extend the lessons with additional suggestions and community activities.

The lesson plans begin with quick overviews and lesson objectives, before detailing how to teach the material. The 3-step, easy-to-follow lesson plans will save you time and provide consistent instruction. Each lesson begins with a warm-up activity, then transitions into teaching the lesson, and ends with opportunities to reinforce and extend instruction. Common errors are also highlighted to alert you to possible errors before they are made. As you plan your lessons, identify the exercises in the *Student Edition* you will assign, as well as the corresponding pages in the *Student Workbook*. Additional, supplemental problems are available at the end of the *Student Workbook* and can be assigned for additional review following each chapter. Answers are provided in the *Teacher's Edition* for all exercises in the *Student Edition/Student Workbook*.

Additional features include Mental Math activities to encourage children to think independently; Calculator activities for practice using a calculator; Career Connection and In The Community to relate math to the real world. These features will help to motivate your child and making their learning relevant. The lesson plans also provide tips on teaching to various learning styles.

As you plan out your lessons, be sure to familiarize yourself with any legal requirements you may have in your local area or state. The Pearson Homeschool website ([PearsonHomeschool.com](http://PearsonHomeschool.com)) has links to each state Department of Education so that you may review the laws and how to comply with them.

# Adapt the Curriculum

One of the great benefits of homeschooling is that you know the instruction is personal. Everything you teach will be personalized to fit your child. The *AGS Mathematics* lessons are easy to pace, and offer enrichment activities to relate lessons to your child and provide additional support when necessary.

## **Pacing**

As you progress through the material you will find that your child grasps certain lessons with ease while needing more time and practice on other sections. Adapt your pace accordingly to ensure your child fully understands the material. Additionally, use the supplementary problems and chapter features to challenge your child and relate lesson to their world. This will allow you to keep your child engaged and interested as you move through the course.

## **Teaching is Everywhere**

One of the greatest benefits of homeschooling is that teaching can occur all of the time. You can incorporate learning into everyday life. When you are outside of “school” ask your child about concepts learned in previous lessons. Use the mental math exercises for on-the-go learning. Use the Career Connection and In The Community features to extend lessons and plan related field trips. You can also use your own resources to complement the material, and tie the lessons into your child’s interests and hobbies.

## **Conflicting Materials**

Any homeschool parent will be faced with the dilemma of what to do when you come across material in the curriculum you don’t like, or that you disagree with. While no curriculum will ever be able to satisfy all the beliefs, opinions or values held by each family, there are several approaches that you can take in these situations.

One approach is to skip over the material in question. Another suggestion would be to use this as an opportunity for a special teachable moment. Review the material with your child. Discuss your feelings about the material, idea or value presented. Take the opportunity to prepare your child for the diversity of thought/opinion in the world and the need to be discerning of principles and ideas that may challenge yours.

There is a definite balance between having the freedom that homeschool brings and the responsibility you assume in educating your child. The good news is that most families find that balance and it works for them.

# Thank you

As you progress along the journey, you will have moments of frustration and moments that make it all worthwhile. Remember to keep it in perspective. Homeschool parents live for those moments when their children are most teachable. You will know when those moments happen as you can see the light go on, they really get it. Cherish those times and use them as the fuel to motivate you through the tough times.

Thank you for choosing Pearson as a partner in your homeschool journey. We know the importance that you place in taking the time to teach your child and we appreciate your trust in us to help you and your child achieve the best education possible.



For additional programs to support your child's mathematics curriculum,  
please visit our website at:

**[www.PearsonHomeschool.com](http://www.PearsonHomeschool.com)**

For other product related questions, please contact 1-800-848-9500  
or submit the Contact Us form available on our website.



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