SHSAT

MATH Practice Workbook 2022

The Most Comprehensive Review for the Math Section of the | SHSAT TEST

2 full-length SHSAT Math practice tests

Test Taker's #1 Choice

Comprehensive SHSAT MATH WorkBook

- ✓ Hone Your Math Skills
- ✓ Boost Your Confidence
- ✓ Overcome Your Exam Anxiety

Visit | EffortlessMath.com/SHSAT for Online SHSAT Math Resources

✓ Recommended by Test Prep Experts

Reza Nazari

SHSAT Math Practice Workbook

2022

The Most Comprehensive Review for the Math Section of the SHSAT Test

By

Reza Nazari

Copyright © 2021
Effortless Math Education Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Ac, without permission of the author.

Effortless Math provides unofficial test prep products for a variety of tests and exams. It is not affiliated with or endorsed by any official organizations.

SHSAT is a registered trademark of the Scholastic Testing Service and is not affiliated with Effortless Math.

All inquiries should be addressed to:
info@effortlessMath.com
www.EffortlessMath.com

ISBN: 978-1-63719-034-0

Published by: **Effortless Math Education Inc.**

For Online Math Practice Visit www.EffortlessMath.com

Welcome to
SHSAT Math Prep
2022



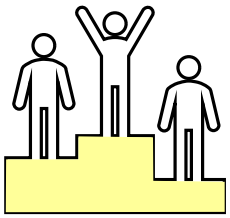
Thank you for choosing Effortless Math for your SHSAT Math test preparation and congratulations on making the decision to take the SHSAT test! It's a remarkable move you are taking, one that shouldn't be diminished in any capacity.

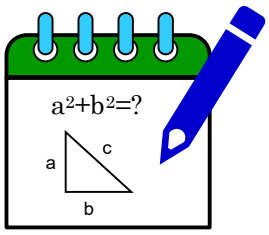


That's why you need to use every tool possible to ensure you succeed on the test with the highest possible score, and this extensive math workbook is one such tool.

If math has never been a strong subject for you, don't worry! This book along with our online SHSAT Math resources will help you prepare for (and even ACE) the SHSAT Math test. As test day draws nearer, effective preparation becomes increasingly more important. Thankfully, you have this comprehensive workbook to help you get ready for the test. With this book and Effortless Math online resources, you can feel confident that you will be more than ready for the SHSAT Math test when the time comes.

First and foremost, it is important to note that this book is a workbook and not a textbook. Every lesson of this practice book was carefully developed to ensure that you are making the most effective use of your time while preparing for the test. This up-to-date book reflects the 2022 test guidelines and will put you on the right track to hone your math skills, overcome exam anxiety, and boost your confidence, so that you can have your best to succeed on the SHSAT Math test.





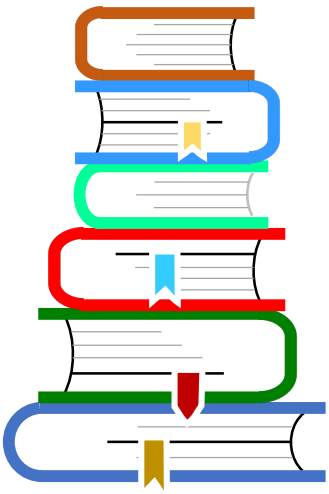
This exercise book will:

- ☑ Explain the format of the SHSAT Math test.
- ☑ Describe specific test-taking strategies that you can use on the test.
- ☑ Provide SHSAT Math test-taking tips.
- ☑ Help you identify the areas in which you need to concentrate your study time.
- ☑ Offer exercises that help you develop the basic math skills you will learn in each section.
- ☑ Give **2 realistic and full-length practice tests** (featuring new question types) with detailed answers to help you measure your exam readiness and build confidence.

This resource contains comprehensive practice questions and exercises that you will need to prepare for the SHSAT Math test. You'll get numerous skill building exercises as well as tips and techniques on how to prepare for your SHSAT math test.

In addition, in the following pages you'll find:

- **How to Use This Book Effectively** – This section provides you with step-by-step instructions on how to get the most out of this comprehensive study guide.
- **How to study for the SHSAT Math Test** – A six-step study program has been developed to help you make the best use of this book and prepare for your SHSAT Math test. Here you'll find tips and strategies to guide your study program and help you understand SHSAT Math and how to ace the test.



- **Don't forget to breathe!** Whenever you notice your mind wandering, your stress levels boosting, or frustration brewing, take a thirty-second break. Shut your eyes, drop your pencil, breathe deeply, and let your shoulders relax. You will end up being more productive when you allow yourself to relax for a moment.
- **Review your answer**. If you still have time at the end of the test, don't waste it. Go back and check over your answers. It is worth going through the test from start to finish to ensure that you didn't make a sloppy mistake somewhere.
- **Optimize your breaks** - When break time comes, use the restroom, have a snack, and reactivate your energy for the subsequent section. Doing some stretches can help stimulate your blood flow.

After your test

- **Take it easy** - You will need to set some time aside to relax and decompress once the test has concluded. There is no need to stress yourself out about what you could've said, or what you may have done wrong. At this point, there's nothing you can do about it. Your energy and time would be better spent on something that will bring you happiness for the remainder of your day.

Contents

Chapter 1: Fractions and Mixed Numbers 1
Simplifying Fractions 2
Adding and Subtracting Fractions 3
Multiplying and Dividing Fractions 4
Adding Mixed Numbers 5
Subtracting Mixed Numbers 6
Multiplying Mixed Numbers 7
Dividing Mixed Numbers 8
Answers – Chapter 1 9
Chapter 2: Decimal 13
Comparing Decimals 14
Rounding Decimals 15
Adding and Subtracting Decimals 16
Multiplying and Dividing Decimals 17
Answers – Chapter 2 18
Chapter 3: Integers and Order of Operations 21
Adding and Subtracting Integers 22
Multiplying and Dividing Integers 23
Order of Operation 24
Integers and Absolute Value 25
Answers – Chapter 3 26
Chapter 4: Ratios and Proportions 29
Simplifying Ratios 30
Proportional Ratios 31
Create Proportion 32
Similarity and Ratios 33
Simple Interest 34
Answers – Chapter 4 35
Chapter 5: Percentage 39
Percent Problems 40
Percent of Increase and Decrease 41

Discount, Tax and Tip 42
Answers – Chapter 5 43
Chapter 6: Expressions and Variables 45
Simplifying Variable Expressions 46
Simplifying Polynomial Expressions 47
Evaluating One Variable 48
Evaluating Two Variables 49
The Distributive Property 50
Answers – Chapter 6 51
Chapter 7: Equations and Inequalities 55
One–Step Equations 56
Multi –Step Equations 57
System of Equations 58
Graphing Single–Variable Inequalities 59
One–Step Inequalities 60
Multi –Step Inequalities 61
Answers – Chapter 7 62
Chapter 8: Lines and Slope 67
Finding Slope 68
Graphing Lines Using Slope–Intercept Form 69
Writing Linear Equations 70
Finding Midpoint 71
Finding Distance of Two Points 72
Answers – Chapter 8 73
Chapter 9: Exponents and Variables 77
Multiplication Property of Exponents 78
Division Property of Exponents 79
Powers of Products and Quotients 80
Zero and Negative Exponents 81
Negative Exponents and Negative Bases 82
Scientific Notation 83
Radicals 84
Answers – Chapter 9 85

Chapter 10: Polynomials 91
Simplifying Polynomials 92
Adding and Subtracting Polynomials 93
Multiplying Monomials 94
Multiplying and Dividing Monomials 95
Multiplying a Polynomial and a Monomial 96
Multiplying Binomials 97
Factoring Trinomials 98
Answers – Chapter 10 99
Chapter 11: Geometry and Solid Figures 105
The Pythagorean Theorem 106
Triangles 107
Polygons 108
Circles 109
Cubes 110
Trapezoids 111
Rectangular Prisms 112
Cylinder 113
Answers – Chapter 11 114
Chapter 12: Statistics 117
Mean, Median, Mode, and Range of the Given Data 118
Pie Graph 119
Probability Problems 120
Permutations and Combinations 121
Answers – Chapter 12 122
Chapter 13: Functions Operations 125
Function Notation and Evaluation 126
Adding and Subtracting Functions 127
Multiplying and Dividing Functions 128
Answers – Chapter 13 129
Time to Test CXXXI
SHSAT Mathematics Practice Test 1 133
SHSAT Mathematics Practice Test 2 151

SHSAT Mathematics Practice Tests Answer Keys 167
SHSAT Mathematics Practice Tests Answers and Explanations 168