ACT Math Practice Workbook

2022

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

By

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Welcome to
ACT Math Prep
2022



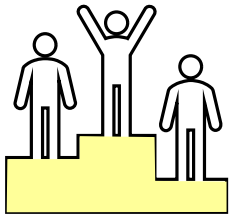
Thank you for choosing Effortless Math for your ACT Math test preparation and congratulations on making the decision to take the ACT test! It's a remarkable move you are taking, one that shouldn't be diminished in any capacity.

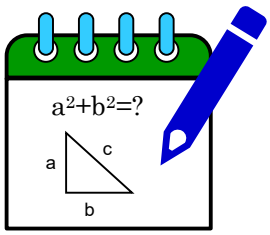


That's why you need to use every tool possible to ensure you succeed on the test with the highest possible score, and this extensive math workbook is one such tool.

This book along with our online ACT Math resources will help you prepare for (and even ACE) the ACT 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 ACT 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 ACT Math test.





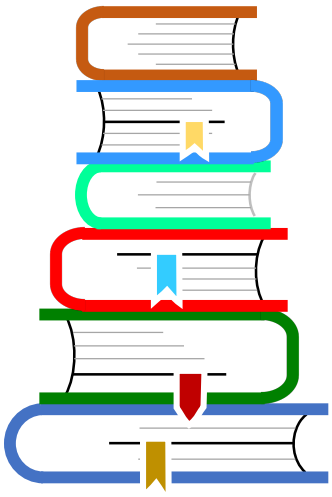
This exercise book will:

- ☑ Explain the format of the ACT Math test.
- ☑ Describe specific test-taking strategies that you can use on the test.
- ☑ Provide ACT 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 ACT Math test. You'll get numerous skill building exercises as well as tips and techniques on how to prepare for your ACT 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 ACT Math Test** – A six-step study program has been developed to help you make the best use of this book and prepare for your ACT Math test. Here you'll find tips and strategies to guide your study program and help you understand ACT Math and how to ace the test.



- **ACT Math Review** – Learn everything you need to know about the ACT Math test.
- **ACT Math Test-Taking Strategies** – Learn how to effectively put these recommended test-taking techniques into use for improving your ACT Math score.
- **Test Day Tips** – Review these tips to make sure you will do your best when the big day comes.

Effortless Math's ACT Online Center

Effortless Math Online ACT Center offers a complete study program, including the following:

- ✓ Step-by-step instructions on how to prepare for the ACT Math test
- ✓ Numerous ACT Math worksheets to help you measure your math skills
- ✓ Complete list of ACT Math formulas
- ✓ Video lessons for all ACT Math topics
- ✓ Full-length ACT Math practice tests
- ✓ And much more…

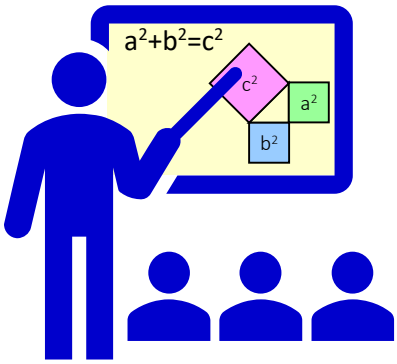
No Registration Required.

Visit **EffortlessMath.com/ACT** to find your online ACT Math resources.

How to Use This Book Effectively

Look no further when you need a study program to improve your math skills to succeed on the math portion of the ACT test. Each chapter of this comprehensive workbook will provide you with the knowledge, tools, and understanding needed for every topic covered on the test.

It's imperative that you understand each topic before moving onto another one, as that's the way to guarantee your success. You can use Effortless Math online course (a free course) to find examples and a step-by-step guide of every math concept in this workbook to better understand the content that will be on the test. To get the best possible results from this book:



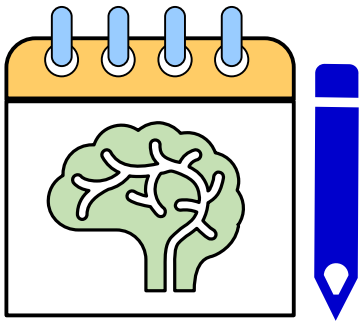
- **Begin studying long before your test date**. This provides you ample time to learn the different math concepts. The earlier you begin studying for the test, the sharper your skills will be. Do not procrastinate! Provide yourself with plenty of time to learn the concepts and feel comfortable that you understand them when your test date arrives.
- **Practice consistently**. Study ACT Math concepts at least 20 to 30 minutes a day. Remember, slow and steady wins the race, which can be applied to preparing for the ACT Math test. Instead of cramming to tackle everything at once, be patient and learn the math topics in short bursts.
- Whenever you get a math problem wrong, **mark it off, and review it later** to make sure you understand the concept.
- Start each session by **looking over the previous material.**
- Once you've reviewed the book's exercises, **take a practice test at the back of the book** to gauge your level of readiness. Then, review your results. Read detailed answers and solutions for each question you missed.
- **Take another practice test** to get an idea of how ready you are to take the actual exam. Taking the practice tests will give you the confidence you need on test day. Simulate the ACT testing environment by sitting in a quiet room free from distraction. Make sure to clock yourself with a timer.

How to Study for the ACT Math Test

Studying for the ACT Math test can be a really daunting and boring task. What's the best way to go about it? Is there a certain study method that works better than others? Well, studying for the ACT Math can be done effectively. The following six-step program has been designed to make preparing for the ACT Math test more efficient and less overwhelming.

Step 1 - Create a study plan
Step 2 - Choose your study resources
Step 3 - Review, Learn, Practice
Step 4 - Learn and practice test-taking strategies
Step 5 - Learn the ACT Test format and take practice tests
Step 6 - Analyze your performance

Step 1: Create a Study Plan



It's always easier to get things done when you have a plan. Creating a study plan for the ACT Math test can help you to stay on track with your studies. It's important to sit down and prepare a study plan with what works with your life, work, and any other obligations you may have. Devote enough time each day to studying. It's also a great idea to break down each section of the exam into blocks and study one concept at a time.
It's important to understand that there is no "right" way to create a study plan. Your study plan will be personalized based on your specific needs and learning style.

Follow these guidelines to create an effective study plan for your ACT Math test:

- ★ **Analyze your learning style and study habits** – Everyone has a different learning style. It is essential to embrace your individuality and the unique way you learn. Think about what works and what doesn't work for you. Do you prefer ACT Math prep books or a combination of textbooks and video lessons? Does it work better for you if you study every night for thirty minutes or is it more effective to study in the morning before going to work?



Adding and Subtracting Fractions

Calculate and write the answer in lowest term.

1) $\frac{1}{3}+\frac{1}{5}=$

2) $\frac{2}{5}+\frac{3}{8}=$

3) $\frac{1}{3}-\frac{2}{9}=$

4) $\frac{4}{5}-\frac{2}{9}=$

5) $\frac{2}{9}+\frac{1}{3}=$

6) $\frac{3}{10}+\frac{2}{5}=$

7) $\frac{9}{10}-\frac{4}{5}=$

8) $\frac{7}{9}-\frac{3}{7}=$

9) $\frac{3}{4}+\frac{1}{3}=$

10) $\frac{3}{8}+\frac{2}{5}=$

11) $\frac{3}{4}-\frac{2}{5}=$

12) $\frac{7}{9}-\frac{2}{3}=$

13) $\frac{4}{9}+\frac{5}{6}=$

14) $\frac{2}{3}+\frac{1}{4}=$

15) $\frac{9}{10}-\frac{3}{5}=$

16) $\frac{7}{12}-\frac{1}{2}=$

17) $\frac{4}{5}+\frac{2}{3}=$

18) $\frac{5}{7}+\frac{1}{5}=$

19) $\frac{5}{9}-\frac{2}{5}=$

20) $\frac{3}{5}-\frac{2}{9}=$

21) $\frac{7}{9}+\frac{1}{7}=$

22) $\frac{5}{8}+\frac{2}{3}=$

23) $\frac{5}{7}-\frac{2}{5}=$

24) $\frac{7}{9}-\frac{3}{4}=$

25) $\frac{3}{5}-\frac{1}{6}=$

26) $\frac{3}{12}+\frac{2}{7}=$

Multiplying and Dividing Fractions

Solve and write the answer in lowest term.

1) $\frac{1}{3} \times \frac{9}{5} =$

2) $\frac{1}{4} \times \frac{3}{7} =$

3) $\frac{1}{5} \div \frac{1}{4} =$

4) $\frac{1}{6} \div \frac{5}{12} =$

5) $\frac{2}{3} \times \frac{4}{7} =$

6) $\frac{5}{7} \times \frac{3}{4} =$

7) $\frac{2}{5} \div \frac{3}{7} =$

8) $\frac{3}{7} \div \frac{5}{8} =$

9) $\frac{3}{8} \times \frac{4}{7} =$

10) $\frac{2}{9} \times \frac{6}{11} =$

11) $\frac{1}{10} \div \frac{3}{8} =$

12) $\frac{3}{10} \div \frac{4}{5} =$

13) $\frac{6}{7} \times \frac{4}{9} =$

14) $\frac{3}{7} \times \frac{5}{6} =$

15) $\frac{7}{9} \div \frac{6}{11} =$

16) $\frac{1}{15} \div \frac{2}{3} =$

17) $\frac{1}{13} \times \frac{1}{2} =$

18) $\frac{1}{12} \times \frac{4}{7} =$

19) $\frac{1}{15} \div \frac{4}{9} =$

20) $\frac{1}{16} \div \frac{1}{2} =$

21) $\frac{4}{7} \times \frac{5}{8} =$

22) $\frac{1}{11} \times \frac{4}{5} =$

23) $\frac{1}{16} \div \frac{5}{8} =$

24) $\frac{1}{15} \div \frac{2}{3} =$

25) $\frac{1}{13} \times \frac{2}{5} =$

26) $\frac{1}{18} \times \frac{3}{7} =$



Adding Mixed Numbers

Solve and write the answer in lowest terms.

1) $1\frac{1}{5}+2\frac{2}{5}=$

2) $1\frac{1}{2}+4\frac{5}{6}=$

3) $2\frac{4}{5}+2\frac{3}{10}=$

4) $3\frac{1}{6}+2\frac{2}{5}=$

5) $1\frac{5}{6}+1\frac{2}{5}=$

6) $3\frac{5}{7}+1\frac{2}{9}=$

7) $3\frac{5}{8}+2\frac{1}{3}=$

8) $1\frac{6}{7}+3\frac{2}{9}=$

9) $2\frac{5}{9}+1\frac{1}{4}=$

10) $3\frac{7}{9}+2\frac{5}{6}=$

11) $2\frac{1}{10}+2\frac{2}{5}=$

12) $1\frac{3}{10}+3\frac{4}{5}=$

13) $3\frac{1}{12}+2\frac{1}{3}=$

14) $5\frac{1}{11}+1\frac{1}{2}=$

15) $3\frac{1}{21}+2\frac{2}{3}=$

16) $4\frac{1}{24}+1\frac{5}{8}=$

17) $2\frac{1}{25}+3\frac{3}{5}=$

18) $3\frac{1}{15}+2\frac{2}{10}=$

19) $5\frac{6}{7}+2\frac{1}{3}=$

20) $2\frac{1}{8}+3\frac{3}{4}=$

21) $2\frac{5}{7}+2\frac{2}{21}=$

22) $4\frac{1}{6}+1\frac{4}{5}=$

23) $2\frac{1}{7}+2\frac{3}{8}=$

24) $3\frac{1}{4}+2\frac{2}{3}=$

25) $1\frac{1}{13}+2\frac{3}{4}=$

26) $3\frac{2}{35}+2\frac{5}{7}=$

Subtracting Mixed Numbers

Solve and write the answer in lowest terms.

1) $5\frac{2}{9} - 2\frac{1}{9} =$

2) $6\frac{2}{7} - 2\frac{1}{3} =$

3) $5\frac{3}{8} - 2\frac{3}{4} =$

4) $7\frac{2}{5} - 3\frac{1}{10} =$

5) $9\frac{5}{7} - 7\frac{4}{21} =$

6) $11\frac{7}{12} - 9\frac{5}{6} =$

7) $9\frac{5}{9} - 8\frac{1}{8} =$

8) $13\frac{7}{9} - 11\frac{3}{7} =$

9) $8\frac{7}{12} - 7\frac{3}{8} =$

10) $11\frac{5}{9} - 9\frac{1}{4} =$

11) $6\frac{5}{6} - 2\frac{2}{9} =$

12) $5\frac{7}{8} - 4\frac{1}{3} =$

13) $9\frac{5}{8} - 8\frac{1}{2} =$

14) $4\frac{9}{16} - 2\frac{1}{4} =$

15) $3\frac{2}{3} - 1\frac{2}{15} =$

16) $5\frac{1}{2} - 4\frac{2}{17} =$

17) $5\frac{6}{7} - 2\frac{1}{3} =$

18) $3\frac{3}{7} - 2\frac{2}{21} =$

19) $7\frac{3}{10} - 5\frac{2}{15} =$

20) $4\frac{5}{6} - 2\frac{2}{9} =$

21) $6\frac{3}{7} - 2\frac{2}{9} =$

22) $7\frac{4}{5} - 6\frac{3}{7} =$

23) $12\frac{3}{7} - 8\frac{1}{3} =$

24) $5\frac{4}{9} - 2\frac{5}{6} =$

25) $10\frac{1}{28} - 7\frac{3}{4} =$

26) $11\frac{5}{12} - 7\frac{5}{48} =$



Multiplying Mixed Numbers

Solve and write the answer in lowest terms.

1) $1\frac{1}{6} \times 1\frac{3}{7} =$

2) $5\frac{1}{6} \times 2\frac{1}{4} =$

3) $3\frac{3}{7} \times 1\frac{2}{9} =$

4) $3\frac{3}{8} \times 3\frac{1}{6} =$

5) $1\frac{1}{2} \times 5\frac{2}{3} =$

6) $3\frac{1}{2} \times 6\frac{2}{3} =$

7) $9\frac{1}{2} \times 2\frac{1}{6} =$

8) $2\frac{5}{8} \times 8\frac{3}{5} =$

9) $3\frac{4}{5} \times 4\frac{2}{3} =$

10) $5\frac{1}{3} \times 2\frac{2}{7} =$

11) $6\frac{1}{3} \times 3\frac{3}{4} =$

12) $7\frac{2}{3} \times 1\frac{8}{9} =$

13) $8\frac{1}{2} \times 2\frac{1}{6} =$

14) $4\frac{1}{5} \times 8\frac{2}{3} =$

15) $3\frac{1}{8} \times 5\frac{2}{3} =$

16) $2\frac{2}{7} \times 6\frac{2}{5} =$

17) $2\frac{3}{8} \times 7\frac{2}{3} =$

18) $1\frac{7}{8} \times 8\frac{2}{3} =$

19) $9\frac{1}{2} \times 3\frac{1}{5} =$

20) $2\frac{5}{8} \times 4\frac{1}{3} =$

21) $6\frac{1}{3} \times 3\frac{2}{5} =$

22) $5\frac{3}{4} \times 2\frac{2}{7} =$

23) $8\frac{1}{6} \times 2\frac{2}{7} =$

24) $4\frac{1}{6} \times 7\frac{1}{5} =$

25) $2\frac{1}{5} \times 2\frac{5}{8} =$

26) $6\frac{2}{3} \times 4\frac{3}{5} =$

Dividing Mixed Numbers

Solve and write the answer in lowest terms.

1) $6\frac{1}{2} \div 4\frac{2}{5} =$

2) $1\frac{3}{8} \div 1\frac{1}{4} =$

3) $6\frac{2}{5} \div 2\frac{4}{5} =$

4) $7\frac{1}{3} \div 6\frac{3}{4} =$

5) $7\frac{2}{5} \div 3\frac{3}{4} =$

6) $2\frac{4}{5} \div 3\frac{2}{3} =$

7) $8\frac{3}{5} \div 4\frac{3}{4} =$

8) $6\frac{3}{4} \div 2\frac{2}{9} =$

9) $5\frac{2}{7} \div 2\frac{2}{9} =$

10) $2\frac{2}{5} \div 3\frac{3}{5} =$

11) $4\frac{3}{7} \div 1\frac{7}{8} =$

12) $2\frac{5}{7} \div 2\frac{4}{5} =$

13) $8\frac{3}{5} \div 6\frac{1}{5} =$

14) $2\frac{5}{8} \div 1\frac{8}{9} =$

15) $5\frac{6}{7} \div 2\frac{3}{4} =$

16) $1\frac{3}{5} \div 2\frac{3}{8} =$

17) $5\frac{3}{4} \div 3\frac{2}{5} =$

18) $2\frac{3}{4} \div 3\frac{1}{5} =$

19) $3\frac{2}{3} \div 1\frac{2}{5} =$

20) $4\frac{1}{4} \div 2\frac{2}{3} =$

21) $3\frac{5}{6} \div 2\frac{4}{5} =$

22) $2\frac{1}{8} \div 1\frac{3}{4} =$

23) $5\frac{1}{2} \div 4\frac{2}{5} =$

24) $6\frac{3}{7} \div 2\frac{1}{7} =$

25) $3\frac{3}{6} \div 1\frac{5}{7} =$

26) $4\frac{4}{9} \div 4\frac{2}{3} =$