7TH GRADE MATH PRACTICE TEST (SAMPLE)

STUDY GUIDE

SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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Table of Contents

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What is the sum of the interior angles in a triangle?

A. 360

B. 90

C. 180

D. 270

2. If 5 workers take 8 hours to finish a job, how many hours would 8 workers take to finish the same job?

A. 6

B. 5

C. 4

D. 3

3. What is the result of 15 + (-8)?

A. 23

B. 7

C. -8

D. 15

4. Which is larger, 2/3 or 3/5?

A. 3/5

B. 1

C. 2/3

D. 5/6

5. A test score increases from 70 to 84. What is the percent increase?

A. 20%

B. 15%

C. 25%

D. 10%

6. Find the median of the data: 3, 7, 7, 2, 9.

A. 7

B. 8

C. 6

D. 5

7. Subtract 1/3 from 5/6.

A. 1/3

B. 5/6

C. 1/6

D. 1/2

8. How many pennies are in $36.00?

A. 3600

B. 360

C. 36000

D. 360000

9. 60% as a fraction in simplest form.

A. 1/2

B. 2/3

C. 3/5

D. 5/6

10. What is the slope of the line through (3, 4) and (6, 10)?

A. 2

B. 3

C. 1

D. 4/3

Answers

1. C
2. B
3. B
4. C
5. A
6. A
7. D
8. A
9. C
10. A

Explanations

1. What is the sum of the interior angles in a triangle?

A. 360

B. 90

C. 180

D. 270

The interior angles of a triangle always add up to 180 degrees. A clear way to see this is to draw a line through the top vertex parallel to the base. The angles at the bottom of the triangle correspond to two angles formed with that parallel line, so those three angles line up along a straight line. A straight line measures 180 degrees, so the three interior angles must sum to 180. For any triangle, whether it's acute, obtuse, or right-angled, the total of its interior angles is 180 degrees.

2. If 5 workers take 8 hours to finish a job, how many hours would 8 workers take to finish the same job?

A. 6

B. 5

C. 4

D. 3

Understanding how work, rate, and time relate. If five workers take eight hours, the total amount of work equals 5 × 8 = 40 units of work (man-hours). The same job requires 40 man-hours in total. With eight workers sharing the workload, time = 40 ÷ 8 = 5 hours. So eight workers would finish in five hours. In general, when everyone works at the same rate, time is inversely proportional to the number of workers. Five hours.

3. What is the result of 15 + (-8)?

A. 23

B. 7

C. -8

D. 15

When you add a negative number, you're essentially subtracting a positive amount. So 15 + (-8) means you start at 15 and move 8 units to the left on the number line, which is the same as 15 − 8. That equals 7. This also follows the rule that when numbers have opposite signs, you subtract the smaller magnitude from the larger and keep the sign of the larger magnitude, which here is the positive 15. So the result is 7. The other results would come from adding the magnitudes (23) or not subtracting at all (15) or taking only the negative part (-8), which aren't what this expression does.

4. Which is larger, 2/3 or 3/5?

A. 3/5

B. 1

C. 2/3

D. 5/6

When comparing fractions with different denominators, make the two fractions easier to compare by either cross-multiplying or using a common denominator. Cross-multiplying gives 2/3 and 3/5: 2×5 = 10 and 3×3 = 9. Since 10 is bigger than 9, the first fraction is larger. You can also rewrite with a common denominator: 2/3 = 10/15 and 3/5 = 9/15, so 10/15 is bigger than 9/15. This matches the decimal idea that 2/3 is about 0.666… while 3/5 is 0.6, so 2/3 is the larger value.

5. A test score increases from 70 to 84. What is the percent increase?

A. 20%

B. 15%

C. 25%

D. 10%

Percent change is found by comparing the amount of increase to the original value. To find the percent increase from 70 to 84, first find the increase: 84 − 70 = 14. Then divide by the original amount: 14 ÷ 70 = 0.2. Convert to a percent: 0.2 × 100 = 20%. So the score increased by 20%. You can check by applying the percent: 70 × 1.20 = 84. For reference, 15% would give 70 × 1.15 = 80.5, 25% would give 87.5, and 10% would give 77, which don't match.

6. Find the median of the data: 3, 7, 7, 2, 9.

A. 7

B. 8

C. 6

D. 5

The median is the middle value of a data set when it's arranged in order. First, arrange the numbers from smallest to largest: 2, 3, 7, 7, 9. With five numbers, the middle position is the third one, which is 7. So the median of the data is 7. The median gives a central point that isn't affected by extreme high or low values as much as an average is.

7. Subtract 1/3 from 5/6.

A. 1/3

B. 5/6

C. 1/6

D. 1/2

Subtracting fractions with different denominators means you first make the bottoms the same. Here, turn 1/3 into sixths: 1/3 = 2/6. Then subtract the numerators while keeping the common denominator: 5/6 - 2/6 = 3/6. Finally, simplify 3/6 by dividing numerator and denominator by 3 to get 1/2. So the result is one half.

8. How many pennies are in $36.00?

A. 3600

B. 360

C. 36000

D. 360000

Converting dollars to pennies: 1 dollar equals 100 pennies. So, to find how many pennies are in $36.00, multiply 36 by 100 (or move the decimal two places to the right). 36 × 100 = 3600 pennies. The other numbers come from multiplying by 10, 1000, or 10000, which doesn't match the fact that there are 100 pennies in every dollar.

9. 60% as a fraction in simplest form.

A. 1/2

B. 2/3

C. 3/5

D. 5/6

Percent means per hundred, so 60% is 60 out of 100, written as 60/100. To turn that into a fraction in simplest form, divide numerator and denominator by their greatest common factor, which is 20. This gives 60/100 = 3/5. That fraction is in simplest terms because 3 and 5 have no common divisors besides 1, and it checks out since 3/5 equals 0.6, which matches 60%. The other options don't match 60% (1/2 is 50%, 2/3 is about 66.7%, and 5/6 is about 83.3%).

10. What is the slope of the line through (3, 4) and (6, 10)?

A. 2

B. 3

C. 1

D. 4/3

Slope tells us how steep a line is, and it's found by rise over run between two points. From (3, 4) to (6, 10), the rise is 10 − 4 = 6 and the run is 6 − 3 = 3. So the slope is 6/3 = 2. A positive slope means the line goes upward as x increases, which matches these two points. If the slope were 3, the rise would need to be 9 for a run of 3; if it were 1, the rise would be 3 for a run of 3; if it were 4/3, the rise would be 4 for a run of 3. None of those match the actual rise of 6 over 3, so the slope is 2.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://7thgrademath.examzify.com

We wish you the very best on your exam journey. You've got this!