GED Math Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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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. Don't worry about getting everything right, 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, and take breaks to retain information better.

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.

7. Use Other Tools

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. One kilogram is approximately equal to how many pounds?

A. 1.1 pounds

B. 2.2 pounds

C. 3.3 pounds

D. 4.4 pounds

2. What is a base number in mathematical terms?

A. A number that is multiplied by an exponent

B. A number that has an exponent

C. A number that is added to another number

D. A number between 0 and 1

3. What is the sum of the angles in a triangle?

A. 90 degrees

B. 180 degrees

C. 270 degrees

D. 360 degrees

4. What is the value of $2^3 + 3^2$?

A. 10

B. 15

C. 17

D. 18

5. What is the median of a set of numbers?

A. The average of all the numbers

B. The difference between the highest and lowest numbers

C. The middle number in a set of numbers in order

D. The mode of the set

6. What is an acute angle?

A. An angle measuring less than 90 degrees

B. An angle measuring more than 180 degrees

C. An angle measuring exactly 90 degrees

D. An angle measuring more than 90 degrees but less than 180 degrees

7. If you invest $1000 at 5% interest for 3 years, how much interest will you earn?

A. $100

B. $150

C. $200

D. $250

8. If the angles of a triangle are in the ratio 2:3:4, what is the measure of the smallest angle?

A. 30 degrees

B. 40 degrees

C. 50 degrees

D. 60 degrees

9. If a bag contains 3 red, 4 blue, and 5 green marbles, what is the probability of picking a red marble?

A. 1/2

B. 1/4

C. 1/3

D. 1/5

10. How many degrees is a right angle?

A. 45 degrees

B. 60 degrees

C. 90 degrees

D. 120 degrees

Answers

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

Explanations

1. One kilogram is approximately equal to how many pounds?

A. 1.1 pounds

B. 2.2 pounds

C. 3.3 pounds

D. 4.4 pounds

One kilogram is approximately equal to 2.2 pounds, making this the correct answer. The conversion factor between kilograms and pounds is based on the definition where one kilogram is equal to about 2.20462 pounds. This means that if you have a weight in kilograms, you can multiply by this factor to find the equivalent weight in pounds. Since 2.2 is a rounded approximation, it is commonly used in practice for easier calculations. The other choices present incorrect values that do not accurately reflect the conversion from kilograms to pounds.

2. What is a base number in mathematical terms?

A. A number that is multiplied by an exponent

B. A number that has an exponent

C. A number that is added to another number

D. A number between 0 and 1

In mathematical terms, a base number refers to the number that is raised to a power, which is represented by an exponent. When you see an expression like \(a^n \), \(a \) is the base, and \(n \) is the exponent. The base is crucial because it indicates the number that will be multiplied by itself a certain number of times dictated by the exponent. The other options describe concepts that do not accurately reflect the definition of a base number. For instance, while a number can be multiplied by an exponent, that doesn't necessarily define what a base is. A base does not necessarily refer to a number that is exclusively added to another number, nor is there an inherent requirement for a base number to be within a certain range like between 0 and 1. Thus, the focus on the relationship between a base and an exponent is what makes that choice correct.

3. What is the sum of the angles in a triangle?

A. 90 degrees

B. 180 degrees

C. 270 degrees

D. 360 degrees

In a triangle, the sum of the interior angles is always 180 degrees. This fundamental property holds true for all types of triangles, whether they are scalene, isosceles, or equilateral. The reasoning behind this can be understood through the concept of triangles formed within a circle or by drawing lines parallel to one of the triangle's sides. When you draw a line parallel to one side of the triangle that intersects the other two sides, you can create alternate interior angles with the corresponding angles of the triangle. The result is that the angles of the triangle along with the formed angles will sum to 180 degrees, illustrating this property geometrically. Understanding this property is crucial in various geometry problems and applications, making it a foundational concept in mathematics. The other choices, while they represent angles related to different geometric shapes, do not apply to the sum of angles in a triangle. For instance, a right angle measures 90 degrees, a half-circle measures 180 degrees, a three-quarters circle measures 270 degrees, and a full circle measures 360 degrees—none of which equate to the interior angles of a triangle.

4. What is the value of $2^3 + 3^2$?

A. 10

B. 15

C. 17

D. 18

To solve the expression \(2^3 + 3^2\), you start by calculating each term separately. First, \(2^3\) means 2 raised to the power of 3, which is calculated as: \[2 \times 2 \times 2 = 8 \] Next, \(3^2\) means 3 raised to the power of 2, which is calculated as: \[3 \times 3 = 9 \] Now, you add the results of these computations together: \[8 + 9 = 17 \] Thus, the value of \(2^3 + 3^2\) is 17, which corresponds to the correct answer. Each component of the expression was evaluated using the rules of exponents, and the subsequent addition led to the final result.

5. What is the median of a set of numbers?

A. The average of all the numbers

B. The difference between the highest and lowest numbers

C. The middle number in a set of numbers in order

D. The mode of the set

The median of a set of numbers is defined as the middle number when the numbers are arranged in ascending or descending order. When you have a set of numbers, you first organize them from the smallest to the largest. If there is an odd number of observations, the median is the value at the center of the list. If there is an even number of observations, the median is calculated by taking the average of the two middle numbers. This concept is important as it provides a measure of central tendency that is less affected by outliers than the mean (the average), which can skew results if there are extreme values in the data set. The other options describe different statistical concepts: the average (mean) considers all numbers, the difference between the highest and lowest refers to the range, and the mode represents the number that appears most frequently in the set. Each of these concepts serves a different purpose in data analysis, but they do not define the median.

6. What is an acute angle?

A. An angle measuring less than 90 degrees

B. An angle measuring more than 180 degrees

C. An angle measuring exactly 90 degrees

D. An angle measuring more than 90 degrees but less than 180 degrees

An acute angle is an angle that measures less than 90 degrees. This means that option B, which states that an acute angle measures more than 180 degrees, is incorrect. Option C, which states that an acute angle measures exactly 90 degrees, is incorrect because a 90 degree angle is considered a right angle, not an acute angle. Option D, which states that an acute angle measures more than 90 degrees but less than 180 degrees, is incorrect because that would describe an obtuse angle, not an acute angle.

7. If you invest $1000 at 5% interest for 3 years, how much interest will you earn?

A. $100

B. $150

C. $200

D. $250

To solve for the interest earned from an investment of $1000 at an interest rate of 5% over 3 years, the formula to use is the simple interest formula: \[\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time} \] Here, the principal is $1000, the rate is 5% (or 0.05 as a decimal), and the time is 3 years. Plugging these values into the formula gives: \[\text{Interest} = 1000 \times 0.05 \times 3 \] Calculating this step-by-step: 1. Calculate the interest for one year: \[1000 \times 0.05 = 50 \] 2. Multiply by the number of years: \[50 \times 3 = 150 \] So, the total interest earned after 3 years will be $150. This amount reflects the accumulation of interest over the time period at the given rate, demonstrating the principles of simple interest calculations.

8. If the angles of a triangle are in the ratio 2:3:4, what is the measure of the smallest angle?

A. 30 degrees

B. 40 degrees

C. 50 degrees

D. 60 degrees

To determine the measure of the smallest angle in a triangle where the angles are in the ratio of 2:3:4, start by denoting each angle based on this ratio. Let's assign the angles as follows: - The first angle = 2x - The second angle = 3x - The third angle = 4x Since the sum of the angles in any triangle is always 180 degrees, we can set up the following equation based on the sum of these angles: 2x + 3x + 4x = 180 degrees Combining the terms on the left-hand side gives: 9x = 180 degrees Now, to find x, divide both sides of the equation by 9: x = 180 degrees / 9 x = 20 degrees Next, we can find the measure of each angle by substituting x back into the expressions for the angles: - The first angle (smallest) = 2x = 2(20 degrees) = 40 degrees - The second angle = 3x = 3(20 degrees) = 60 degrees - The third angle = 4x = 4(20 degrees) = 80 degrees

9. If a bag contains 3 red, 4 blue, and 5 green marbles, what is the probability of picking a red marble?

A. 1/2

B. 1/4

C. 1/3

D. 1/5

To find the probability of picking a red marble from the bag, you first need to determine the total number of marbles. The bag contains 3 red marbles, 4 blue marbles, and 5 green marbles. Adding these together gives you: 3 (red) + 4 (blue) + 5 (green) = 12 total marbles. Now, the probability of picking a red marble is calculated by taking the number of favorable outcomes (which in this case is the number of red marbles) and dividing it by the total number of outcomes (the total number of marbles): Probability of picking a red marble = Number of red marbles / Total number of marbles = 3 red marbles / 12 total marbles = 3/12 = 1/4. Therefore, the probability of picking a red marble is indeed 1/4, confirming that this answer reflects the correct calculation of probabilities based on the provided conditions.

10. How many degrees is a right angle?

A. 45 degrees

B. 60 degrees

C. 90 degrees

D. 120 degrees

A right angle measures 90 degrees. This measurement is fundamental in geometry and is defined as the angle formed when two lines intersect perpendicularly. The concept of a right angle is critical in various applications, ranging from architecture to carpentry, and serves as a reference point for other angles. The answer correctly identifies this standard measurement of a right angle, differentiating it clearly from other common angles, such as those measuring 45 degrees, 60 degrees, or 120 degrees, which have different applications and characteristics within geometric principles.

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://gedmath.examzify.com

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