CBEST Math Practice Exam (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. 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. Which number is prime?

A. 7

B. 9

C. 1

D. 12

2. A school bus travels at 40 mph for 2.5 hours. How many miles does it cover?

A. 80

B. 100

C. 120

D. 140

3. A rectangle has length 8 and width 3. What is its area?

A. 20

B. 24

C. 28

D. 32

4. How many quarts are in 1 gallon?

A. 4 quarts

B. 2 quarts

C. 8 quarts

D. 6 quarts

5. If a circle has radius 5 cm, what is its area? Use π ≈ 3.14.

A. 70.0

B. 78.0

C. 78.5

D. 80.0

6. Which statement correctly describes an isosceles triangle?

A. All three sides are equal

B. No sides are equal

C. Two sides are equal

D. The angles are all equal

7. The data set -2, -1, 0, 1, 2: what is the median?

A. -1

B. -2

C. 0

D. 1

8. Which of the following numbers is a cube number?

A. 9

B. 27

C. 18

D. 12

9. Which statement defines the mean of a data set?

A. The most frequent value

B. The middle value when ordered

C. The arithmetic average computed as sum divided by count

D. The spread between minimum and maximum

10. Sum of interior angles of a quadrilateral is

A. 360 degrees

B. 180 degrees

C. 540 degrees

D. 720 degrees

Answers

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

Explanations

1. Which number is prime?

A. 7

B. 9

C. 1

D. 12

Prime numbers are numbers greater than 1 that have exactly two distinct positive divisors: 1 and the number itself. The number seven has divisors only 1 and 7, so it is prime. The other options don't fit: nine is divisible by 1, 3, and 9; one has only one divisor (itself); twelve is divisible by several numbers (1, 2, 3, 4, 6, and 12).

2. A school bus travels at 40 mph for 2.5 hours. How many miles does it cover?

A. 80

B. 100

C. 120

D. 140

Distance traveled at a constant speed is found by multiplying the speed by the time. The bus travels 40 miles each hour for 2.5 hours, so multiply 40 × 2.5. Splitting 2.5 into 2 + 0.5 gives 40×2 = 80 and 40×0.5 = 20, which adds up to 100. So the bus covers 100 miles. The other options correspond to different amounts of time (2 hours → 80; 3 hours → 120; 3.5 hours → 140).

3. A rectangle has length 8 and width 3. What is its area?

A. 20

B. 24

C. 28

D. 32

Area is found by multiplying length by width. With a length of 8 and a width of 3, multiply 8 × 3 to get 24. This represents the number of unit squares that fit inside the rectangle—8 across and 3 down gives 24 total. The other numbers don't come from using both dimensions together in a multiplication, so they don't describe the space inside the rectangle. The area is 24 square units.

4. How many quarts are in 1 gallon?

A. 4 quarts

B. 2 quarts

C. 8 quarts

D. 6 quarts

In the US customary system, a gallon is made up of four quarts because a quart is one fourth of a gallon. Equivalently, a gallon equals 128 fluid ounces and a quart equals 32 fluid ounces, and 128 ÷ 32 = 4. So there are four quarts in one gallon. If you see other numbers, they correspond to wrong fractions: two quarts is half a gallon, eight quarts is two gallons, and six quarts is 1.5 gallons.

5. If a circle has radius 5 cm, what is its area? Use π ≈ 3.14.

A. 70.0

B. 78.0

C. 78.5

D. 80.0

Area of a circle comes from A = π r^2. With a radius of 5 cm, you substitute: A ≈ 3.14 × (5)^2 = 3.14 × 25 = 78.5 square centimeters. So using π ≈ 3.14 gives 78.5 cm^2, which is why that value is the correct area. The area grows with the square of the radius, so changing the radius has a big effect.

6. Which statement correctly describes an isosceles triangle?

A. All three sides are equal

B. No sides are equal

C. Two sides are equal

D. The angles are all equal

Two sides being equal in length defines an isosceles triangle. This means the triangle has exactly two sides that match, setting it apart from a triangle where all three sides are equal (equilateral) or where no sides are equal (scalene). A handy related fact is that the angles opposite those equal sides are also equal, which often helps with solving problems involving angles. The other descriptions describe different types: all three sides equal points to an equilateral triangle, no sides equal points to a scalene triangle, and having all angles equal would also indicate an equilateral triangle in a standard triangle.

7. The data set -2, -1, 0, 1, 2: what is the median?

A. -1

B. -2

C. 0

D. 1

The median is the middle value of a sorted list. With five data points, the median is the third value when the numbers are ordered. The set -2, -1, 0, 1, 2 is already in order, so the middle value is 0. Therefore, the median is 0. If the data had an even number of values, you'd average the two middle numbers, but here there's an odd count, so it's straightforward.

8. Which of the following numbers is a cube number?

A. 9

B. 27

C. 18

D. 12

A cube number is a number that can be written as n cubed for some integer n. Think of small cubes: 1, 8, 27, 64, and so on. In the list, nine isn't a cube because the cubes surrounding it are eight and twenty-seven, so it doesn't equal any n^3. Twenty-seven is exactly 3 cubed, so it is a cube number. Eighteen and twelve also fall between eight and twenty-seven and aren't equal to any integer cube. So the cube number in the set is twenty-seven.

9. Which statement defines the mean of a data set?

A. The most frequent value

B. The middle value when ordered

C. The arithmetic average computed as sum divided by count

D. The spread between minimum and maximum

The mean is the arithmetic average of a data set. It is found by adding all the numbers and dividing by how many numbers there are. For example, with the values 2, 4, and 6, the sum is 12 and there are 3 values, so the mean is 12 divided by 3, which equals 4. This value represents the balance point of the data. The other descriptions refer to different summary measures: the value that occurs most often is the mode; the middle value when the data are arranged in order is the median; and the spread between the minimum and maximum values is the range. Hence, the statement that the arithmetic average is computed as the sum divided by the count correctly defines the mean.

10. Sum of interior angles of a quadrilateral is

A. 360 degrees

B. 180 degrees

C. 540 degrees

D. 720 degrees

Sum of interior angles for a quadrilateral is 360 degrees. You can see this by drawing a diagonal to split the shape into two triangles; each triangle's interior angles add to 180 degrees, so together they total 360. This also fits the general rule for polygons: the sum is (n−2)×180 degrees, and with four sides that becomes (4−2)×180 = 360. The other numbers correspond to figures with different numbers of sides: 180 is for a triangle, 540 for a pentagon, and 720 for a hexagon.

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://cbestmath.examzify.com

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