

COLLEGE MATH CLEP PREP PRACTICE EXAM (SAMPLE)

STUDY GUIDE



Prepare with structure. Pass with confidence



Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	15

SAMPLE

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

SAMPLE

1. The equation $x + 6 = 11$ can be solved by
 - A. Subtraction
 - B. Division
 - C. Multiplication
 - D. Addition
2. What is the result of $\frac{3}{4}$ divided by $\frac{2}{3}$?
 - A. $\frac{7}{12}$
 - B. $\frac{9}{8}$
 - C. $\frac{6}{5}$
 - D. $\frac{5}{2}$
3. What is the range of the function $y = 3x - 2$?
 - A. -2
 - B. 0
 - C. 2
 - D. 3
4. What is the simplified form of $(5x+3)(x-7)$?
 - A. $5x-21$
 - B. $5x^2+18$
 - C. $5x^2-21x$
 - D. $5x^2-23x+21$
5. What is the simplified form of the expression $(5x + 6) + (2x - 10)$?
 - A. $7x + 16$
 - B. $7x + 10$
 - C. $7x - 10$
 - D. $7x - 4$
6. How many sides does a hexagon have?
 - A. 8
 - B. 6
 - C. 4
 - D. 5

7. What is the sum of -6 and 8?

- A. -6
- B. -2
- C. 4
- D. 14

8. What is the vertical asymptote of the function $y = 1/x$?

- A. $x = 0$
- B. $y = 0$
- C. $x = 1$
- D. $y = 1$

9. If a triangle has two sides measuring 5 cm and 10 cm, what is the longest length of the third side?

- A. 15 cm
- B. 25 cm
- C. 10 cm
- D. 5 cm

10. Choose the pair of numbers whose product is the closest to 99.

- A. 11, 10
- B. 9, 11
- C. 8, 13
- D. 7, 15

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. The equation $x + 6 = 11$ can be solved by

A. Subtraction

B. Division

C. Multiplication

D. Addition

To solve for x in the equation $x + 6 = 11$, one needs to isolate the x variable on one side of the equation. In this case, 6 is added to x , so to undo this operation, we need to subtract 6 from both sides. This will leave us with just x on the left side and 5 on the right side, giving us the correct answer of $x = 5$. None of the other options - division, multiplication, or addition - would be effective in isolating and solving for x in this equation.

2. What is the result of $3/4$ divided by $2/3$?

A. $7/12$

B. $9/8$

C. $6/5$

D. $5/2$

When dividing fractions, we can multiply the reciprocal of the second fraction. For this problem, it would be $2/3$ multiplied by $3/2$. This gives us a result of 1. This means that $1/1$ is equivalent to $3/4$ divided by $2/3$. Then, we can simplify the fraction $3/4$ to $6/8$. So, the final result is $6/5$. This shows that option A, $7/12$, and option B, $9/8$, are incorrect. Option D, $5/2$, is also incorrect as it is the result of multiplying the fractions instead of dividing.

3. What is the range of the function $y = 3x - 2$?

A. -2

B. 0

C. 2

D. 3

The range of a function is the set of all possible outputs or y -values. In this case, the function $y = 3x - 2$ is a linear function with a slope of 3 and a y -intercept of -2. This means that for every input value, the output will be three times the input value minus 2. Therefore, the range of this function is all real numbers except for 3, which is the slope. The choices A, B, and C are not correct because they each represent a single value, while the range of a function can contain multiple values. Additionally, they do not consider the slope of the function, which is an important factor in determining the range.

4. What is the simplified form of $(5x+3)(x-7)$?

- A. $5x-21$
- B. $5x^2+18$
- C. $5x^2-21x$
- D. $5x^2-23x+21$**

The simplified form of the expression $(5x+3)(x-7)$ is $5x^2-23x+21$. This is because in order to simplify, we must distribute the $5x$ and 3 to each term within the parentheses. This results in $5x^2-35x+3x-21$, which can then be combined and simplified to $5x^2-23x+21$. Option A is incorrect because it only accounts for the distribution of the $5x$, but not the 3 . Option B is incorrect because it does not distribute the $5x$ to the $(x-7)$ term. Option C is incorrect because it does not account for the distribution of the 3 as well as the -7 in the second parentheses. Therefore, the only correct option is D, which fully distributes and simplifies the expression.

5. What is the simplified form of the expression $(5x + 6) + (2x - 10)$?

- A. $7x + 16$
- B. $7x + 10$**
- C. $7x - 10$
- D. $7x - 4$

To simplify this expression, we need to combine like terms. In this expression, $(5x + 6)$ and $(2x - 10)$ are like terms because they both contain the variable x . To combine these terms, we simply add the coefficients of the x terms. So $5x + 2x = 7x$. Then we add the constants, $6 + (-10) = -4$. Therefore, the simplified form is $7x - 4$, which is option D. Option A, $7x + 16$, is incorrect because the constant terms, 6 and -10 , were not correctly combined. Option C, $7x - 10$, is incorrect because the constant terms, 6 and -10 , were not correctly combined. Option D, $7x - 4$, is the correct choice.

6. How many sides does a hexagon have?

- A. 8
- B. 6**
- C. 4
- D. 5

A hexagon has 6 sides because it is a polygon with six straight sides and six angles. Option A (8) cannot be the right answer because an octagon has eight sides and is not the same shape as a hexagon. Option C (4) is incorrect because a square has four sides and is also not the same shape as a hexagon. Option D (5) is incorrect because a pentagon has five sides and is not the same shape as a hexagon. Therefore, the correct answer is B.

7. What is the sum of -6 and 8?

- A. -6
- B. -2
- C. 4**
- D. 14

The sum of -6 and 8 can be found by adding -6 with 8. This yields a total of 2, which is the correct answer. Option A, -6, is the value of the first number and would not result in a sum of 2. Option B, -2, is the difference between -6 and 8, not the sum. And option D, 14, is the sum of the two numbers when they are added in the incorrect order ($8 + (-6) = 14$). Therefore, option C is the only option that correctly represents the sum of -6 and 8.

8. What is the vertical asymptote of the function $y = 1/x$?

- A. $x = 0$**
- B. $y = 0$
- C. $x = 1$
- D. $y = 1$

The vertical asymptote of a function is a vertical line that the graph of the function approaches but never touches. In this case, the function is $y = 1/x$. As the value of x approaches 0, the value of the function becomes extremely large (positive or negative), but it never actually reaches 0. This is because as x approaches 0 from the positive side, the value of y gets larger and larger, while as x approaches 0 from the negative side, the value of y gets smaller and smaller. Therefore, the vertical asymptote of this function is $x = 0$. Option B, $y = 0$, is incorrect because the graph of the function itself does not go through the y -axis, so $y = 0$ is not an asymptote. Option C, $x = 1$, is incorrect because it is not related to the function y .

9. If a triangle has two sides measuring 5 cm and 10 cm, what is the longest length of the third side?

- A. 15 cm**
- B. 25 cm
- C. 10 cm
- D. 5 cm

The longest length of the third side of a triangle with two sides measuring 5 cm and 10 cm can be found using the Pythagorean theorem, which states that in a right triangle, the square of the length of the hypotenuse (longest side) is equal to the sum of the squares of the lengths of the other two sides. In this case, the hypotenuse length can be calculated as $\sqrt{5^2 + 10^2} = \sqrt{25 + 100} = \sqrt{125} = 11.18$ cm. Therefore, option A (15 cm) is the correct answer as it is the closest approximation to the square root of 125. Options B, C, and D are incorrect because they do not match the calculated value of the hypotenuse length. Moreover, option D (5 cm) is already given as one

10. Choose the pair of numbers whose product is the closest to 99.

A. 11, 10

B. 9, 11

C. 8, 13

D. 7, 15

While it may seem intuitive to pick option B, as its numbers are both prime and closer to 99 individually, we must remember the rule that the product should be closest to 99. Choosing B would give us 99 as its product, while option C would give us 104, making B incorrect. Option D may also seem like a feasible choice, with its two prime numbers and a closer individual number to 99, but its product is farther away at 105. Therefore, the best choice is C as its product of 104 is the closest to 99 and it has the added advantage of having both its numbers as prime.

SAMPLE

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://collegemathematicscleppractice.examzify.com>

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

SAMPLE