

HSPT MATH PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://hsptmath.examzify.com>



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. What is 15% of 200?

- A. 20
- B. 25
- C. 30
- D. 35

2. A mathematical phrase containing variables, numbers, and operations is referred to as what?

- A. Numerical expression
- B. Variable expression
- C. Arithmetic sequence
- D. Geometric sequence

3. Which term describes operations that undo each other?

- A. Inverse Operations
- B. Complementary Operations
- C. Similar Operations
- D. Dependent Operations

4. Which mathematical concept illustrates the relationship using pairs of values?

- A. Equation
- B. Inequality
- C. Ordered Pair
- D. Expression

5. What is 9^2 ?

- A. 72
- B. 81
- C. 90
- D. 99

6. If a car travels 60 miles in 1 hour, how far will it travel in 3 hours at the same speed?
- A. 120 miles
 - B. 180 miles
 - C. 240 miles
 - D. 150 miles
7. How many degrees are in a right angle?
- A. 90 degrees
 - B. 80 degrees
 - C. 100 degrees
 - D. 70 degrees
8. What is the term for the process of replacing variables with numbers and simplifying an expression?
- A. Evaluate
 - B. Calculate
 - C. Order of operations
 - D. Numerical expression
9. How many degrees are in a straight line?
- A. 90 degrees
 - B. 180 degrees
 - C. 360 degrees
 - D. 270 degrees
10. In geometry, what is defined as the longest chord in a circle?
- A. Radius
 - B. Chord
 - C. Diameter
 - D. Arc

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is 15% of 200?

- A. 20
- B. 25
- C. 30**
- D. 35

To find 15% of 200, you can convert the percentage to a decimal and then multiply it by the total amount. First, convert 15% to a decimal by dividing by 100: $15\% = 15/100 = 0.15$. Next, multiply this decimal by 200: $0.15 \times 200 = 30$. Thus, 15% of 200 is 30, which is why this answer is correct. It is important to remember the steps for converting percentages to decimals and how to use them in multiplication to calculate part of a whole.

2. A mathematical phrase containing variables, numbers, and operations is referred to as what?

- A. Numerical expression
- B. Variable expression**
- C. Arithmetic sequence
- D. Geometric sequence

A mathematical phrase that contains variables, numbers, and operations is specifically described as a variable expression. This is because a variable expression includes at least one variable, which represents an unknown value, alongside constants (numbers) and mathematical operations such as addition, subtraction, multiplication, or division. In contrast, a numerical expression consists solely of numbers and operations without any variables. An arithmetic sequence, on the other hand, is a list of numbers where each term after the first is generated by adding a constant to the previous term, and a geometric sequence involves multiplication, where each term after the first is found by multiplying the previous term by a fixed, non-zero number. Therefore, the details of the query align most closely with the definition of a variable expression, making it the appropriate choice.

3. Which term describes operations that undo each other?

- A. Inverse Operations**
- B. Complementary Operations
- C. Similar Operations
- D. Dependent Operations

The term that describes operations that undo each other is inverse operations. In mathematics, operations such as addition and subtraction are considered inverses of each other, as are multiplication and division. For example, if you add a number and then subtract the same number, you return to your original number; likewise, multiplying a number and then dividing it by the same number also leads you back to where you started. This relationship is crucial in solving equations. When you perform an operation on one side of an equation, you typically use the inverse operation on the other side to maintain balance. Understanding inverse operations helps in various mathematical contexts, including algebra, where solving for an unknown variable often involves applying these properties to isolate the variable. The other options do not accurately define this concept.

4. Which mathematical concept illustrates the relationship using pairs of values?

- A. Equation
- B. Inequality
- C. Ordered Pair**
- D. Expression

The concept that illustrates a relationship using pairs of values is an ordered pair. An ordered pair consists of two elements, typically written in the form (x, y) . This notation is commonly used in coordinate geometry to represent points on a plane. The first value, x , usually corresponds to a horizontal position, while the second value, y , corresponds to a vertical position. Ordered pairs enable the representation of relationships between two quantities, allowing for visual interpretation as points on a graph. For instance, the ordered pair $(3, 5)$ indicates that at $x = 3$, the corresponding value of y is 5. This concept is fundamental in mathematics, particularly in functions where each input (x) is associated with exactly one output (y), forming a relationship that can be examined and graphed. While equations, inequalities, and expressions are all important mathematical concepts, they do not specifically denote relationships using pairs of values in the same direct manner as ordered pairs do. An equation can express a relationship between variables, but it does not necessarily showcase specific pairs of values. An inequality shows a relationship of less than or greater than, and an expression represents a mathematical phrase without a relationship to specific variable pairs.

5. What is 9^2 ?

- A. 72
- B. 81**
- C. 90
- D. 99

To solve for 9^2 , you need to multiply 9 by itself. This means you calculate: $9 \times 9 = 81$. The result is 81, which represents the area of a square with each side measuring 9 units. Comprehending square numbers is fundamental in mathematics, as they frequently come up in various contexts, including geometry and algebra. Therefore, the correct answer is indeed 81.

6. If a car travels 60 miles in 1 hour, how far will it travel in 3 hours at the same speed?

- A. 120 miles
- B. 180 miles**
- C. 240 miles
- D. 150 miles

To determine how far the car will travel in 3 hours at the same speed, start by identifying the rate at which the car is traveling, which is 60 miles per hour. Using the formula for distance, which is: $\text{Distance} = \text{Speed} \times \text{Time}$, you can calculate the distance for 3 hours. Since the car moves at a constant speed of 60 miles per hour, you multiply this speed by the time traveled, which is 3 hours: $\text{Distance} = 60 \text{ miles/hour} \times 3 \text{ hours} = 180 \text{ miles}$. This calculation shows that if the car continues to move at the same speed for the additional 3 hours, it will cover a distance of 180 miles. Thus, the correct answer reflects the total distance traveled in that time period.

7. How many degrees are in a right angle?

- A. 90 degrees
- B. 80 degrees
- C. 100 degrees
- D. 70 degrees

A right angle is defined as an angle that measures exactly 90 degrees. This fundamental concept in geometry is crucial, as right angles are used to define perpendicular lines and are a key component in various geometric shapes, such as squares and rectangles. Recognizing that a right angle measures 90 degrees allows one to understand relationships between other angles, particularly complementary angles, which sum to 90 degrees. Therefore, the correct answer directly follows from the established geometric definition of a right angle.

8. What is the term for the process of replacing variables with numbers and simplifying an expression?

- A. Evaluate
- B. Calculate
- C. Order of operations
- D. Numerical expression

The term for the process of replacing variables with numbers and simplifying an expression is "evaluate." When you evaluate an expression, you substitute each variable with a specific numerical value and then perform the arithmetic operations to simplify the expression to a single numerical result. This process is essential in mathematics, especially in algebra, where you often work with expressions that contain variables. For example, if you have an expression like $2x + 3$ and you need to evaluate it for $x = 4$, you would replace x with 4 to get $2(4) + 3$, which simplifies to $8 + 3$, resulting in 11. This showcases how evaluation allows you to find out the numeric value of an expression based on given variable values, leading to an understanding of the behavior of the expression under specific conditions. The other choices refer to related but distinct concepts. "Calculate" typically means performing arithmetic operations to find a result but doesn't specifically imply substitution of variables. "Order of operations" is a guideline for the sequence in which operations should be performed in an expression but does not encompass the entire process of evaluating it. "Numerical expression" describes an expression that contains only numbers and operations without variables and thus is not related to the act

9. How many degrees are in a straight line?

- A. 90 degrees
- B. 180 degrees
- C. 360 degrees
- D. 270 degrees

A straight line measures 180 degrees. This is defined in geometry, where a straight angle is formed by two rays that point in opposite directions, creating a line. When you consider the angle formed at any point on a straight line, it represents a half-turn, which corresponds to 180 degrees. The other choices reflect different kinds of angles or full rotations. For instance, 90 degrees is a right angle, while 360 degrees represents a complete rotation around a point. The 270 degrees would indicate a three-quarters rotation. However, the angle that precisely defines a straight line is unequivocally 180 degrees.

10. In geometry, what is defined as the longest chord in a circle?

- A. Radius
- B. Chord
- C. Diameter
- D. Arc

The longest chord in a circle is the diameter. A diameter is a special type of chord that passes through the center of the circle, effectively dividing it into two equal halves. By definition, a chord is any line segment whose endpoints lie on the circle, but the diameter is the only chord that stretches across the entire width of the circle. It is important to note that while the radius connects the center of the circle to any point on its circumference, it is always shorter than the diameter. An arc refers to a segment of the circumference of the circle, which is not relevant in this context when discussing chords. Thus, the diameter, being the largest possible chord, is correctly identified as the answer.

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://hsptmath.examzify.com>

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

SAMPLE