

HESI MATH PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://hesimath.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 does the term "Whole" refer to in the Whole, Part, Percent equation?
 - A. The total amount
 - B. A segment of the total
 - C. The percentage value
 - D. The difference between values
2. What is the probability of flipping a coin and getting heads?
 - A. 0.25
 - B. 0.5
 - C. 1
 - D. 0.75
3. Convert 50% into a decimal.
 - A. 0.25
 - B. 0.5
 - C. 0.75
 - D. 1.0
4. What is the next number in the sequence: 2, 4, 6, __?
 - A. 7
 - B. 8
 - C. 9
 - D. 10
5. What does the fraction bar signify in a fraction?
 - A. Addition of the numerator and denominator
 - B. Division between the numerator and denominator
 - C. Multiplication of the numerator by the denominator
 - D. Subtraction of the denominator from the numerator
6. What is the equivalent of 1 milliliter in cubic centimeters?
 - A. 1 cubic centimeter
 - B. 10 cubic centimeters
 - C. 100 cubic centimeters
 - D. 0.1 cubic centimeters

7. What fraction represents 20%?

- A. $\frac{1}{4}$
- B. $\frac{1}{5}$
- C. $\frac{2}{10}$
- D. $\frac{3}{15}$

8. How many meters are in a kilometer?

- A. 100
- B. 500
- C. 1,000
- D. 1,500

9. What is the absolute value of -10?

- A. -10
- B. 10
- C. 0
- D. 1

10. Which of the following statements is true regarding numbers to the right of the decimal point?

- A. They are whole numbers
- B. They have different terminology than whole numbers
- C. They are always ignored in calculations
- D. They cannot be less than ten

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What does the term "Whole" refer to in the Whole, Part, Percent equation?

- A. The total amount**
- B. A segment of the total
- C. The percentage value
- D. The difference between values

In the context of the Whole, Part, Percent equation, the term "Whole" represents the total amount or entirety of the values being considered. This term is essential because it sets the foundation for calculating the relationship between the part and the percent. When you have a whole, you can derive parts of it based on given percentages. For example, if you have a total of 100 (the whole) and you want to find out what 25% represents, the "whole" is the 100 – it is the complete quantity from which the part (25) and the percentage (25%) are derived. Understanding this relationship is crucial in various mathematical contexts, including financial calculations, statistics, and everyday problem-solving scenarios. The other options represent different concepts that do not align with the definition of "Whole" in this equation. The total amount is what encompasses the entire value, highlighting its importance in understanding how parts and percentages relate to that complete figure.

2. What is the probability of flipping a coin and getting heads?

- A. 0.25
- B. 0.5**
- C. 1
- D. 0.75

The probability of flipping a coin and getting heads is 0.5. In a fair coin, there are two equally likely outcomes: heads and tails. The probability of an event can be calculated as the number of favorable outcomes divided by the total number of possible outcomes. Here, there is 1 favorable outcome (getting heads) out of 2 possible outcomes (heads or tails). Therefore, the calculation is: $\text{Probability of heads} = \frac{\text{Number of favorable outcomes (heads)}}{\text{Total number of outcomes (heads + tails)}} = \frac{1}{2} = 0.5$. This shows that there is a 50% chance of getting heads on a single flip of a coin, reinforcing why the answer is 0.5.

3. Convert 50% into a decimal.

- A. 0.25
- B. 0.5**
- C. 0.75
- D. 1.0

To convert a percentage into a decimal, you can follow a simple process: divide the percentage by 100. In this case, 50% means you take 50 and divide it by 100. Performing the calculation: $50 \div 100 = 0.50$. Thus, 50% expressed as a decimal is 0.50. This conversion is fundamental in mathematics, particularly in finance and statistics, where percentages are often used to represent proportions. The other choices do not accurately represent the conversion from 50%. Therefore, the correct answer is indeed 0.5.

4. What is the next number in the sequence: 2, 4, 6, __?

- A. 7
- B. 8**
- C. 9
- D. 10

To identify the next number in the sequence 2, 4, 6, we can first observe the pattern in the numbers presented. Each number in the sequence increases by 2. - Starting with 2, if we add 2, we get 4. - Then, adding 2 to 4 results in 6. Continuing this pattern, if we add 2 to 6, we arrive at 8. Therefore, the next number in the sequence is 8. This consistent addition of 2 establishes a clear arithmetic sequence, making 8 the logical continuation of this pattern.

5. What does the fraction bar signify in a fraction?

- A. Addition of the numerator and denominator
- B. Division between the numerator and denominator**
- C. Multiplication of the numerator by the denominator
- D. Subtraction of the denominator from the numerator

The fraction bar in a fraction serves as a division symbol, indicating that the numerator (the top number) is to be divided by the denominator (the bottom number). For example, in the fraction $\frac{3}{4}$, the fraction bar signifies that 3 is divided by 4, resulting in the value of the fraction being 0.75. This is a fundamental aspect of fractions and is critical for understanding how to perform operations involving them, such as simplifying fractions or performing arithmetic with them. Recognizing the fraction bar as an indication of division is essential for accurately interpreting fractions in various mathematical contexts.

6. What is the equivalent of 1 milliliter in cubic centimeters?

- A. 1 cubic centimeter**
- B. 10 cubic centimeters
- C. 100 cubic centimeters
- D. 0.1 cubic centimeters

One milliliter is defined as exactly one cubic centimeter. This is a fundamental conversion in the metric system where the liter is the base unit of volume. Since a milliliter is one-thousandth of a liter, and a cubic centimeter is also one-thousandth of a liter, it directly follows that they are equal in volume measurement. Therefore, when converting milliliters to cubic centimeters, they have a one-to-one correspondence, meaning that 1 milliliter equals 1 cubic centimeter. This relationship is foundational in many scientific and medical calculations, making it crucial to understand and remember.

7. What fraction represents 20%?

- A. $\frac{1}{4}$
- B. $\frac{1}{5}$**
- C. $\frac{2}{10}$
- D. $\frac{3}{15}$

To determine which fraction represents 20%, it's essential to first convert the percentage into a fraction. The percent symbol (%) denotes "per hundred," so 20% can be expressed as $\frac{20}{100}$. Next, we can simplify this fraction. Both the numerator (20) and the denominator (100) can be divided by their greatest common divisor, which is 20. When we divide both the numerator and the denominator by 20, we get: $20 \div 20 = 1$ $100 \div 20 = 5$. This simplification results in the fraction $\frac{1}{5}$. Therefore, 20% is equivalent to the fraction $\frac{1}{5}$, making it the correct representation. By comparison, the other options do not simplify to represent 20%. $\frac{1}{4}$ corresponds to 25%, $\frac{2}{10}$ simplifies to $\frac{1}{5}$ but is not the simplest form to consider in this context, and $\frac{3}{15}$ simplifies to $\frac{1}{5}$ as well but isn't 20% when originally evaluated. Thus, $\frac{1}{5}$ is indeed the fraction that correctly represents 20%.

8. How many meters are in a kilometer?

- A. 100
- B. 500
- C. 1,000**
- D. 1,500

A kilometer is defined as equal to 1,000 meters. This metric conversion is based on the metric system, where the prefix 'kilo-' signifies a factor of one thousand. Therefore, when converting kilometers to meters, you multiply the number of kilometers by 1,000 to find the equivalent length in meters. For example, if you have 1 kilometer, you multiply by 1,000, resulting in 1,000 meters. Thus, the answer is indeed accurate, confirming that there are 1,000 meters in one kilometer.

9. What is the absolute value of -10?

- A. -10
- B. 10**
- C. 0
- D. 1

The absolute value of a number refers to its distance from zero on a number line, without considering direction. In simpler terms, it is always a non-negative number, as it reflects how far a number is from zero. For the specific case of -10, the distance from zero is 10 units. Therefore, the absolute value of -10 is represented as 10. This aligns directly with the definition of absolute value, which always yields a positive result or zero (for the number zero itself). Thus, 10 is indeed the correct answer.

10. Which of the following statements is true regarding numbers to the right of the decimal point?

- A. They are whole numbers
- B. They have different terminology than whole numbers
- C. They are always ignored in calculations
- D. They cannot be less than ten

The statement is true because numbers to the right of the decimal point are indeed referred to by different terminology than whole numbers. In decimal notation, these numbers represent fractional parts of a whole and are classified as decimal fractions. For example, in the number 2.5, the "5" is in the tenths place, indicating it is five-tenths or one-half of a whole. This is distinct from whole numbers, which do not include decimal points or fractions. Understanding this distinction is important in mathematics, as it influences how numbers are manipulated and interpreted in calculations. Terminology associated with numbers to the right of the decimal includes terms like "tenths," "hundredths," and "thousandths," which help specify their value based on their position. Identifying and distinguishing these terms is crucial for proper mathematical communication and understanding.

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://hesimath.examzify.com>

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

SAMPLE