NATIONAL TESTING NETWORK (NTN) FIREFIGHTER TESTING SYSTEM (FIRETEAM) MATH PRACTICE TEST (SAMPLE)

STUDY GUIDE

SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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https://ntn-firefightertestingsystemmath.examzify.com

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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. If there are 3 fire companies and each company has 6 firefighters, how many firefighters are there in total?

A. 12 firefighters

B. 18 firefighters

C. 24 firefighters

D. 30 firefighters

2. If 2,000 is compared to 200, what is this represented as a fraction?

A. 1/10

B. 1/4

C. 1/2

D. 9/10

3. What is the result of subtracting 24 from 30?

A. 8

B. 7

C. 6

D. 5

4. If a total length of hose needed is 800 feet, how many sections are required?

A. 14 sections

B. 15 sections

C. 16 sections

D. 17 sections

5. If a fire in a building reaches 200 feet and a firefighter can spray water up to 120 feet high, how many feet higher is the fire?

A. 60 feet

B. 80 feet

C. 100 feet

D. 70 feet

6. How long will a firefighter take to cover 10 miles if they run at a speed of 5 miles per hour?

A. 1 hour

B. 2 hours

C. 3 hours

D. 4 hours

7. Calculate the perimeter of a triangle with sides measuring 7 feet, 24 feet, and 25 feet.

A. 56 feet

B. 50 feet

C. 62 feet

D. 48 feet

8. If a firehouse has 4 vehicles and each vehicle can carry 1,000 pounds of equipment, what is the total weight capacity of all vehicles combined?

A. 2,000 pounds

B. 3,000 pounds

C. 4,000 pounds

D. 5,000 pounds

9. By how much does 30 exceed 5?

A. 25

B. 27

C. 23

D. 20

10. If 30 is decreased by 7, what is the result?

A. 23

B. 24

C. 22

D. 20

Answers

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

Explanations

1. If there are 3 fire companies and each company has 6 firefighters, how many firefighters are there in total?

A. 12 firefighters

B. 18 firefighters

C. 24 firefighters

D. 30 firefighters

To determine the total number of firefighters, you need to multiply the number of fire companies by the number of firefighters in each company. In this scenario, there are 3 fire companies and each has 6 firefighters. The calculation goes as follows: Total firefighters = Number of companies × Firefighters per company So, you would calculate: Total firefighters = 3 companies × 6 firefighters/company = 18 firefighters. This calculation confirms that there are indeed 18 firefighters in total, which is why this answer is correct.

2. If 2,000 is compared to 200, what is this represented as a fraction?

A. 1/10

B. 1/4

C. 1/2

D. 9/10

*To determine how 2,000 compares to 200 when represented as a fraction, we start by understanding the relationship between the two numbers. When comparing two quantities as a fraction, we set up the fraction with the first number (2,000) as the numerator and the second number (200) as the denominator. Thus, we form the fraction: \[\frac{2000}{200} \] Next, we simplify this fraction. To do this, we can divide both the numerator and the denominator by the same number. In this case, we can divide by 200: \[\frac{2000 \div 200}{200 \div 200} = \frac{10}{1} \] This simplification shows that 2000 is actually 10 times larger than 200, which can also be expressed as the whole number 10, or, in terms of a fraction, it can imply the part of a whole. To express 200 as a fraction of 2,000, we can invert our perspective: \[\frac{200}{2000} \] Now, simplifying this, we divide both the numerator and the denominator by 200: \[\frac{200 *

3. What is the result of subtracting 24 from 30?

A. 8

B. 7

C. 6

D. 5

To find the result of subtracting 24 from 30, we perform the operation 30 - 24. When you subtract a smaller number from a larger number, you are effectively determining how much more the larger number is than the smaller one. In this case, taking 24 away from 30 leaves you with 6. This is because if we break it down step-by-step: - Start with 30. - When you remove 24, you are left with a remainder of 6 since 30 consists of 24 plus 6 (30 = 24 + 6). Thus, the correct result of the operation is clearly 6. This illustrates how direct subtraction works, reinforcing the understanding of basic arithmetic operations.

4. If a total length of hose needed is 800 feet, how many sections are required?

A. 14 sections

B. 15 sections

C. 16 sections

D. 17 sections

To determine the number of hose sections required for a total length of 800 feet, it's important to know the length of each individual hose section. In many firefighting scenarios, hose sections are frequently 50 feet long. To find out how many sections are needed, divide the total desired length of hose by the length of one hose section: \[\text{Number of sections} = \frac{\text{Total length of hose}}{\text{Length of one section}} \] In this case, if each section is 50 feet long, the calculation would be: \[\text{Number of sections} = \frac{800 \text{ feet}}{50 \text{ feet/section}} = 16 \text{ sections} \] This calculation shows that 16 sections of 50 feet are required to meet the total length of 800 feet. Hence, the answer is correct as it aligns perfectly with the requirement based on the standard section length.

5. If a fire in a building reaches 200 feet and a firefighter can spray water up to 120 feet high, how many feet higher is the fire?

A. 60 feet

B. 80 feet

C. 100 feet

D. 70 feet

To determine how many feet higher the fire is compared to the firefighter's ability to spray water, subtract the height the firefighter can achieve from the height of the fire. In this scenario, the fire reaches a height of 200 feet, while the firefighter can spray water only up to 120 feet. To find the difference in height, the calculation is as follows: 200 feet (height of the fire) - 120 feet (height the firefighter can spray) = 80 feet. This shows that the fire is 80 feet higher than the reach of the firefighter's water spray. This method effectively illustrates how to compare two quantities and find the difference, which is a fundamental concept in mathematics.

6. How long will a firefighter take to cover 10 miles if they run at a speed of 5 miles per hour?

A. 1 hour

B. 2 hours

C. 3 hours

D. 4 hours

To determine how long it will take a firefighter to cover a distance of 10 miles while running at a speed of 5 miles per hour, you can use the formula for time, which is: Time = Distance / Speed In this case, the distance is 10 miles, and the speed is 5 miles per hour. Plugging in these values gives: Time = 10 miles / 5 miles per hour When you perform the division, you find that: Time = 2 hours This indicates that at a speed of 5 miles per hour, it will indeed take the firefighter 2 hours to run 10 miles. Understanding this relationship between distance, speed, and time is crucial, as it forms the basis of many scenarios involving movement and travel, particularly in the context of firefighting situations where time and efficiency can be critically important.

7. Calculate the perimeter of a triangle with sides measuring 7 feet, 24 feet, and 25 feet.

A. 56 feet

B. 50 feet

C. 62 feet

D. 48 feet

To find the perimeter of a triangle, you simply add the lengths of all three sides together. In this case, the triangle has sides measuring 7 feet, 24 feet, and 25 feet. When you perform the addition: 7 feet + 24 feet + 25 feet = 56 feet Thus, the perimeter of the triangle is 56 feet. This calculation is straightforward and involves basic arithmetic, which is essential in solving various problems in geometry. Understanding how to calculate the perimeter allows you to determine the total distance around the triangle, which can be pertinent in practical situations such as landscaping, fencing, or other applications where you need to know the total length of the triangle's edges.

8. If a firehouse has 4 vehicles and each vehicle can carry 1,000 pounds of equipment, what is the total weight capacity of all vehicles combined?

A. 2,000 pounds

B. 3,000 pounds

C. 4,000 pounds

D. 5,000 pounds

To determine the total weight capacity of all the vehicles combined, you start by considering how much weight each vehicle can carry and the number of vehicles available. Each vehicle has a capacity of 1,000 pounds, and there are 4 vehicles. You multiply the capacity of one vehicle by the total number of vehicles: 1,000 pounds per vehicle × 4 vehicles = 4,000 pounds. This calculation shows that the total weight capacity of all the vehicles combined is 4,000 pounds. The answer reflects the accurate application of multiplication to find the total based on individual capacities and quantities.

9. By how much does 30 exceed 5?

A. 25

B. 27

C. 23

D. 20

To determine how much 30 exceeds 5, you simply subtract 5 from 30. This calculation gives you: 30 - 5 = 25 This result indicates that 30 is 25 units greater than 5. The question is asking for the difference between the two numbers, which is why the subtraction method is appropriate. This understanding is critical in various mathematical contexts, especially for scenarios that involve comparing quantities or calculating differences, such as in statistics, budgeting, or even spatial measurements. Therefore, the correct answer is 25, demonstrating that 30 surpasses 5 by this amount.

10. If 30 is decreased by 7, what is the result?

A. 23

B. 24

C. 22

D. 20

To determine the result of decreasing 30 by 7, you need to perform a simple subtraction operation. Starting with the number 30, you subtract 7 from it: 30 - 7 = 23. Thus, the result of decreasing 30 by 7 is indeed 23. This confirms that the answer is accurate. When you subtract a smaller number (7) from a larger number (30), the outcome reflects the difference between the two values, which in this case is 23.

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://ntn-firefightertestingsystemmath.examzify.com

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