NLN NEX Math Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

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. What is the Fahrenheit temperature when Celsius is 0 degrees?

A. 0

B. 32

C. 212

D. -32

2. Which term describes the divisor in a division problem?

A. Dividend

B. Remainder

C. Divisor

D. Quotient

3. Which term describes a probability of 100% or 1?

A. random variable

B. certain outcome

C. impossible outcome

D. mutually exclusive outcomes

4. One gallon equals how many milliliters?

A. 946

B. 237

C. 473

D. 3785

5. Two tablespoons equal how many fluid drams?

A. 4

B. 6

C. 8

D. 2

6. Find the circumference of a circle with radius 3 units.

A. 3π

B. 9π

C. 12π

D. 6π

7. What is the formula for the diameter of a circle in terms of the radius?

A. 2r

B. r^2

C. πr^2

D. πd

8. What is the circumference of a circle with radius 5 units?

A. 5π

B. 10π

C. 15π

D. 20π

9. In a division expression, which term represents the dividend?

A. Divisor

B. Dividend

C. Quotient

D. Remainder

10. Given P(A or B) = 0.75, P(A) = 0.4, P(B) = 0.5, what is P(A and B)?

A. 0.25

B. 0.75

C. 0.85

D. 0.15

Answers

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

Explanations

1. What is the Fahrenheit temperature when Celsius is 0 degrees?

A. 0

B. 32

C. 212

D. -32

When two temperature scales measure the same physical point, they relate by a linear formula that both shifts and scales the numbers. The standard conversion is F = (9/5)C + 32. That means the Celsius 0 corresponds to Fahrenheit 32, and a change of 1°C equals a change of 9/5°F. So if Celsius is 0, plug in C = 0: F = (9/5)*0 + 32 = 32. This is also why 0°C is known as the freezing point of water, which is 32°F. For reference, 100°C corresponds to 212°F, and 0°F would be about -17.8°C.

2. Which term describes the divisor in a division problem?

A. Dividend

B. Remainder

C. Divisor

D. Quotient

In division, the divisor is the number you divide by—the amount that goes into the dividend how many times. The dividend is the number being divided, the quotient is the result, and the remainder is what's left over when it doesn't divide evenly. For example, in 18 ÷ 3 = 6, 18 is the dividend, 3 is the divisor, and 6 is the quotient. If you had 26 ÷ 5, you'd get a quotient of 5 with a remainder of 1; the divisor remains the 5. So the term describing the divisor is the divisor.

3. Which term describes a probability of 100% or 1?

A. random variable

B. certain outcome

C. impossible outcome

D. mutually exclusive outcomes

A probability of 1 means the outcome is guaranteed to happen in every trial. That is called a certain outcome (a certain event). It's the strongest possible probability: the event is bound to occur, so its chance is 100%. Think of it this way: probabilities range from 0 to 1, with 1 signifying certainty. A random variable is simply a way to assign numbers to outcomes, not a statement about a single likelihood. An impossible outcome has probability 0, meaning it cannot occur. Mutually exclusive outcomes are events that cannot happen at the same time in a single trial, which is about how events relate to each other, not about their magnitude of probability.

4. One gallon equals how many milliliters?

A. 946

B. 237

C. 473

D. 3785

Converting gallons to milliliters uses the relationship that one US gallon is about 3.785 liters, and since 1 liter equals 1000 milliliters, one gallon is roughly 3785 milliliters. The exact value is 3.78541 liters or 3785.41 milliliters, so rounding to the nearest milliliter gives 3785 mL. This aligns with the idea that a gallon is about 3.8 liters. The other options are much smaller than a full gallon, so they don't represent the total milliliters in one gallon.

5. Two tablespoons equal how many fluid drams?

A. 4

B. 6

C. 8

D. 2

The idea is to convert through common kitchen and apothecary units. There are 2 tablespoons in a fluid ounce, and 1 fluid ounce equals 8 fluid drams. So two tablespoons are exactly 1 fluid ounce, which is 8 fluid drams.

6. Find the circumference of a circle with radius 3 units.

A. 3π

B. 9π

C. 12π

D. 6π

The main idea is that the circumference is linked to the radius by the formula C = 2πr. With a radius of 3, substitute into that formula: C = 2π × 3 = 6π. Another way to see it is to use the diameter, since d = 2r = 6, and C = πd = π × 6 = 6π. Both paths give the same exact result, 6π units. The other numbers would come from using an incorrect radius or diameter in the formula.

7. What is the formula for the diameter of a circle in terms of the radius?

A. 2r

B. r^2

C. πr^2

D. πd

The diameter is twice the radius. The radius is the distance from the center to the edge, and the diameter passes through the center, hitting the circle on both sides. That means the diameter is made up of two radii, so its length is 2r. The other expressions don't give a length in terms of radius: r^2 is the radius squared and appears in the area formula A = πr^2; πr^2 is the area, not a length; and πd is π times the diameter, which relates to circumference (C = πd) but isn't the diameter itself in terms of the radius.

8. What is the circumference of a circle with radius 5 units?

A. 5π

B. 10π

C. 15π

D. 20π

The main idea is that the circumference of a circle is 2π times the radius. With a radius of 5, you multiply 2π by 5: 2π × 5 = 10π units. You can also check using the diameter: the diameter is 2r = 10, and C = πd = π × 10 = 10π, which matches. The other numbers come from misapplying the formula, like using πr (which would give 5π and misses the factor of 2) or mixing up diameter values. The correct result is 10π.

9. In a division expression, which term represents the dividend?

A. Divisor

B. Dividend

C. Quotient

D. Remainder

In division, the quantity you start with—the amount that is being divided—is called the dividend. For example, in 18 ÷ 6 = 3, 18 is the dividend, 6 is the divisor, 3 is the quotient, and there is no remainder. The divisor is the number you divide by, the quotient is the result of the division, and the remainder is what's left over if it doesn't divide evenly. So the dividend is the number that is being partitioned.

10. Given P(A or B) = 0.75, P(A) = 0.4, P(B) = 0.5, what is P(A and B)?

A. 0.25

B. 0.75

C. 0.85

D. 0.15

The key idea is inclusion-exclusion for probabilities: P(A or B) equals P(A) plus P(B) minus P(A and B). So to find the overlap, you solve P(A and B) = P(A) + P(B) − P(A or B). Plugging in the numbers: 0.4 + 0.5 − 0.75 = 0.15. This value makes sense because the overlap cannot exceed either individual probability and is the portion that was counted twice when adding P(A) and P(B). The overlap is 0.15, the probability that both A and B occur.

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://nlnnexmath.examzify.com

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