Army Land Navigation/Map Reading 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. How do you use dead reckoning in navigation?

A. By following a natural waterway

B. By plotting a course using known points and estimated speeds

C. By observing the weather patterns

D. By relying on instinct

2. What is one method to hold a compass for accurate reading?

A. Compass-to-Cheek Method

B. Reverse Orientation Method

C. Angle Alignment Method

D. Horizontal Sight Method

3. How many mils are in one degree?

A. 10 mils

B. 17.7 mils

C. 20 mils

D. 36 mils

4. What is the advantage of using natural landmarks for navigation?

A. They are flashy and distract from navigation

B. They can provide unreliable references

C. They can provide immediate, reliable references

D. They require complex understanding to use

5. What is the term for the difference between true north and magnetic north?

A. Declination

B. Conversion

C. Deviation

D. Bearing

6. What does the military grid reference system (MGRS) provide?

- **A. A method for navigation by stars**
- **B. A standardized reference for positioning**
- **C. A way to calculate terrain elevation**
- **D. A system for weather forecasts**

7. What does consistent checking of your heading help to prevent?

- **A. Straying off course**
- **B. Feeling disoriented**
- **C. Losing your supplies**
- **D. Underestimating travel times**

8. What is a characteristic of contour lines that indicate a cut?

- **A. They have tick marks pointing toward higher ground**
- **B. The line extends lengthwise with no ticks**
- **C. They have tick marks extending from the cut line to the roadbed**
- **D. They use dashed lines**

9. To improve accuracy, how many known locations should be used when plotting on a map?

- **A. One**
- **B. Two**
- **C. Four**
- **D. Five**

10. What shape do contour lines form to indicate a valley?

- **A. U-shaped or V-shaped**
- **B. Straight lines**
- **C. Circles**
- **D. Wavy lines**

Answers

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

Explanations

1. How do you use dead reckoning in navigation?

A. By following a natural waterway

B. By plotting a course using known points and estimated speeds

C. By observing the weather patterns

D. By relying on instinct

Using dead reckoning in navigation involves plotting a course based on known starting points and estimating your speed and direction of travel over time. This technique allows one to calculate the current position by using the last known location and making adjustments based on the distance traveled and the bearing taken. Dead reckoning can be especially useful when visibility is poor or when navigating through terrain without prominent landmarks. It is an essential skill for all navigators, as it helps to determine an accurate route even in unfamiliar or featureless environments. Estimating speed and direction is critical, as any mistakes can lead to significant navigational errors over distance. The other methods mentioned, such as following natural waterways, relying on instinct, and observing weather patterns, do not provide the structured approach of dead reckoning. They may depend more on environmental factors or subjective feelings, rather than the systematic calculations and planning inherent in dead reckoning navigation.

2. What is one method to hold a compass for accurate reading?

A. Compass-to-Cheek Method

B. Reverse Orientation Method

C. Angle Alignment Method

D. Horizontal Sight Method

The Compass-to-Cheek Method is a well-established technique for obtaining accurate compass readings. This method involves holding the compass against your cheek, usually with the needle pointing in the desired direction of travel. By aligning the sighting line with your eye and the direction of the needle, you can effectively minimize any parallax error and ensure that you are reading the compass accurately. When using this method, the user can take advantage of their natural line of sight to better align themselves with the target direction, which enhances precision. It also stabilizes the compass, as it allows for better control and reduces movement, which can lead to inaccurate readings. In contrast, the other methods listed may focus on different aspects of compass use or may not achieve the same level of accuracy. For instance, reverse orientation could confuse the direction of the compass needle, and angle alignment may depend on specific calculations that require more advanced understanding. Horizontal sight methods might not provide the same level of contact and stability that the Compass-to-Cheek Method does, making it a preferred choice for both novice and experienced navigators.

3. How many mils are in one degree?

A. 10 mils

B. 17.7 mils

C. 20 mils

D. 36 mils

One degree is equivalent to approximately 17.7 mils. This conversion is based on the relationship between degrees and mils, which are both units of angular measurement. In military applications, particularly in land navigation and artillery, mils are often used for precise aiming and adjustments. To understand this better, consider that a full circle is 360 degrees. In mils, a full circle is defined as 6400 mils. Thus, the conversion can be calculated by dividing the total number of mils in a circle (6400) by the total number of degrees in a circle (360). This results in about 17.7 mils per degree, a value that is particularly useful in military operations where quick mental calculations are required. This understanding of the conversion between degrees and mils is crucial for effective navigation and coordination in the field, emphasizing why it is important for soldiers to be familiar with these measurements.

4. What is the advantage of using natural landmarks for navigation?

A. They are flashy and distract from navigation

B. They can provide unreliable references

C. They can provide immediate, reliable references

D. They require complex understanding to use

Using natural landmarks for navigation offers immediate, reliable references that can significantly enhance a navigator's ability to maintain direction and find their way. These landmarks, such as mountains, rivers, or unique rock formations, are tangible features that are often visible from long distances. Their permanence and distinctiveness make them effective guides for understanding one's location relative to the terrain, helping prevent confusing situations that might arise from solely relying on digital or compass readings, especially in environments where technical navigation aids fail or are impractical. Natural landmarks can assist in cross-checking your position, offering a straightforward visual cue that can confirm your intended route. They often serve as good waypoints to gauge distance traveled and establish overall progress toward a destination. Overall, the reliability of these references in providing a clear and immediate indication of direction is a significant advantage in land navigation situations.

5. What is the term for the difference between true north and magnetic north?

A. Declination

B. Conversion

C. Deviation

D. Bearing

The term for the difference between true north and magnetic north is known as declination. This concept is crucial in navigation and map reading because it allows navigators and map users to adjust their compass readings to account for the variation between where the compass points (magnetic north) and the actual geographic north (true north). Declination is typically expressed in degrees and can vary depending on your location on Earth. It can be either east or west, indicating whether magnetic north is to the east or west of true north. This adjustment is particularly important for accurate navigation, as failing to account for declination can lead to navigational errors. In summary, understanding declination is essential for anyone using a compass in conjunction with a map, ensuring they are able to plot their courses accurately and effectively navigate their environment.

6. What does the military grid reference system (MGRS) provide?

A. A method for navigation by stars

B. A standardized reference for positioning

C. A way to calculate terrain elevation

D. A system for weather forecasts

The military grid reference system (MGRS) is a precise and standardized method used to identify locations on the Earth's surface. It converts geographic coordinates into a grid format, which can be easily communicated and interpreted across various units and operations. By providing a consistent reference framework, it ensures that all personnel can share and understand geographic positions without confusion. This capability is essential for navigation, targeting, and coordination in military operations. The other options, such as navigation by stars, calculating terrain elevation, or weather forecasting, do not align with the primary purpose of the MGRS. While these elements can be important in a military context, they are not functions provided by the MGRS, which specifically focuses on position referencing.

7. What does consistent checking of your heading help to prevent?

A. Straying off course

B. Feeling disoriented

C. Losing your supplies

D. Underestimating travel times

Consistent checking of your heading is crucial in land navigation because it ensures that you remain aligned with your intended route. By regularly verifying your heading, you can detect any deviations from your planned course early on. This practice helps you to make necessary corrections before straying too far from your path. Straying off course can happen easily, especially in unfamiliar terrain where landmarks may not be visible or where environmental factors, such as weather or obstacles, may influence your direction. Thus, maintaining awareness of your heading serves as a safeguard against unintentional misnavigation. As a result, this technique is vital for successful navigation and reaching your destination efficiently.

8. What is a characteristic of contour lines that indicate a cut?

A. They have tick marks pointing toward higher ground

B. The line extends lengthwise with no ticks

C. They have tick marks extending from the cut line to the roadbed

D. They use dashed lines

In topographic maps, contour lines represent elevation and terrain features. When a contour line indicates a cut (such as where a roadbed is constructed through a hill), it is depicted with tick marks extending from the cut line towards the roadbed. These tick marks are placed on the downhill side of the contour line to provide clear visual guidance about where the elevation change occurs. The presence of these tick marks functioning in this manner allows map readers to easily identify areas of excavation where the land has been cut into to form a path or roadbed. This is crucial for understanding the terrain and for planning navigation or construction in the area. Such visual cues help distinguish between different types of landforms and their configurations, enhancing the practicality of the map in navigation or field operations.

9. To improve accuracy, how many known locations should be used when plotting on a map?

A. One

B. Two

C. Four

D. Five

Using two known locations when plotting on a map is essential for achieving an accurate position fix. When you only have one location, you can determine a position within a certain radius, but you lack the necessary triangulation to pinpoint an exact location. By incorporating two known points, you can create intersecting lines or ranges that converge at a specific point. This method enhances accuracy significantly, as it allows for the validation and correction of any potential errors that might occur from a single reference point. In land navigation, the concept of triangulation relies on drawing lines from multiple known locations to find a position. If you were to use more than two points, like four or five, while they could potentially improve accuracy even more, they may complicate the process and aren't strictly necessary for basic navigation tasks. Thus, while using two known locations is the minimum needed for an effective plotting practice, it strikes the right balance between accuracy and simplicity in navigation techniques.

10. What shape do contour lines form to indicate a valley?

A. U-shaped or V-shaped

B. Straight lines

C. Circles

D. Wavy lines

Contour lines are an essential feature in topographic mapping, representing changes in elevation across the landscape. When it comes to indicating a valley, these lines typically form a distinctive U-shape or V-shape. This formation occurs because the contour lines will point upwards toward higher ground, with the apex of the V or U shape indicating the highest elevation surrounding the valley. As water flows downhill, it tends to create valleys, and the contour lines visually depict this downward slope. The opening of the V or U shape points in the direction of the uphill slope, highlighting the low area of the valley where water would accumulate. Understanding this relationship is fundamental for navigation and interpreting the terrain effectively. In contrast, straight lines would suggest a flat, uniform area without significant elevation changes, circles indicate peaks or pits rather than valleys, while wavy lines don't convey the clear directional flow that characterizes valleys. Thus, recognizing the U or V shapes formed by contour lines is crucial for land navigation and determining the topography of an area.

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://armylandnavigationmapreading.examzify.com

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