Armed Forces Classification Test (AFCT) Arithmetic Reasoning 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 area of a rectangle with a length of 10 meters and a width of 4 meters?**

   A. 30 square meters

   B. 40 square meters

   C. 50 square meters

   D. 60 square meters

2. **The ratio of girls to boys born at a hospital is 2:5. If there were 35 births one day, how many babies born were girls?**

   A. 15

   B. 10

   C. 20

   D. 5

3. **If you save $50 every month for a year, how much will you have saved in total?**

   A. $500

   B. $600

   C. $700

   D. $800

4. **If 35 acres are destroyed out of 42, what percent of the acres are destroyed?**

   A. 70%

   B. 80%

   C. 83 1/3%

   D. 90%

5. **What is 25% of 480?**

   A. 90

   B. 100

   C. 120

   D. 150

6. If a car uses 12 gallons of gas to travel 300 miles, what is the gas mileage in miles per gallon?

A. 20 miles per gallon

B. 22 miles per gallon

C. 25 miles per gallon

D. 30 miles per gallon

7. If you spend $0.12 per day on kilowatts, how much do you spend in one year?

A. $36.50

B. $43.80

C. $55.20

D. $39.90

8. A car travels 60 miles in 1 hour. How far does it travel in 3 hours?

A. 120 miles

B. 150 miles

C. 180 miles

D. 240 miles

9. If a TV costs $600 and the tax rate is 7.75%, what was the amount of tax on the TV?

A. $51.75

B. $46.50

C. $48.25

D. $49.50

10. If a person deposits $300 into an account and then withdraws 60% of his account after one month which yields him a withdrawal of $264, how much originally was in his account?

A. $140

B. $360

C. $300

D. $264

Answers

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

Explanations

1. What is the area of a rectangle with a length of 10 meters and a width of 4 meters?

A. 30 square meters

B. 40 square meters

C. 50 square meters

D. 60 square meters

To calculate the area of a rectangle, you use the formula: Area = Length × Width In this case, the length is 10 meters and the width is 4 meters. Plugging in these values gives: Area = 10 meters × 4 meters = 40 square meters This correctly calculates the total space enclosed by the rectangle. The area is measured in square meters, reflecting how much surface the rectangle covers. Therefore, the correct answer is 40 square meters, which corresponds to the dimensions provided in the question.

2. The ratio of girls to boys born at a hospital is 2:5. If there were 35 births one day, how many babies born were girls?

A. 15

B. 10

C. 20

D. 5

To determine how many girls were born based on the given ratio of girls to boys, we start with understanding the ratio itself. The ratio of girls to boys is 2:5, which means for every 2 girls, there are 5 boys. The total parts of the ratio can be added together: 2 (girls) + 5 (boys) = 7 (total parts). Next, we need to figure out how many of these parts correspond to the total number of births, which is given as 35. To find the value of each part, we take the total number of births and divide it by the total parts in the ratio: 35 births ÷ 7 parts = 5 births per part. Since girls constitute 2 parts of the ratio, we can now calculate the number of girls: 2 parts × 5 births per part = 10 girls. Thus, from the total of 35 births, 10 were girls. This shows how the ratio directly relates to the total number of births, allowing us to find the number of girls born.

3. If you save $50 every month for a year, how much will you have saved in total?

A. $500

B. $600

C. $700

D. $800

To determine the total savings after a year by saving $50 each month, you need to multiply the monthly savings by the number of months in a year. In this scenario, you save $50 every month. Since a year consists of 12 months, the calculation would be: $50 (monthly savings) x 12 (months) = $600 (total savings). This amount represents the total after consistently contributing $50 each month over a full year, which aligns with the choice of $600. The calculation reflects straightforward arithmetic, emphasizing the importance of consistent saving and the impact of time on savings growth.

4. If 35 acres are destroyed out of 42, what percent of the acres are destroyed?

A. 70%

B. 80%

C. 83 1/3%

D. 90%

To determine the percentage of acres that are destroyed, you can use the formula for percentage, which is: $$\text{Percentage} = \left(\frac{\text{Part}}{\text{Whole}}\right) \times 100$$ In this case, the part is the number of acres destroyed, which is 35, and the whole is the total number of acres, which is 42. Substituting these values into the formula gives: $$\text{Percentage} = \left(\frac{35}{42}\right) \times 100$$ First, calculate the fraction: $$\frac{35}{42} = \frac{5}{6}$$ Now, multiply by 100 to convert it to a percentage: $$\frac{5}{6} \times 100 = 83.33\%$$ To express this as a fraction in mixed number form, 83.33% can be represented as $83 \frac{1}{3}\%$. Therefore, the correct answer is that 83 and 1/3 percent of the acres are destroyed. This option accurately reflects the calculation of the destroyed acres when compared to

5. What is 25% of 480?

A. 90

B. 100

C. 120

D. 150

To determine what 25% of 480 is, you start by understanding that 25% can be converted to a fraction, which is 25/100 or 1/4. This means finding 25% of a number is equivalent to dividing that number by 4. Now, divide 480 by 4: 480 ÷ 4 = 120. This calculation shows that 25% of 480 is indeed 120. Therefore, when evaluating the options, the correct answer reflects the accurate computation of how percentages work, particularly the concept of finding a quarter of a whole. Thus, 120 properly represents 25% of 480.

6. If a car uses 12 gallons of gas to travel 300 miles, what is the gas mileage in miles per gallon?

A. 20 miles per gallon

B. 22 miles per gallon

C. 25 miles per gallon

D. 30 miles per gallon

To find the gas mileage in miles per gallon, you need to divide the total distance traveled by the total gallons of gas used. In this case, the car travels 300 miles and uses 12 gallons of gas. The calculation would look like this: Gas mileage = Total miles traveled / Total gallons of gas used So, replacing with the relevant numbers: Gas mileage = 300 miles / 12 gallons When you perform the division, you get: Gas mileage = 25 miles per gallon This means that for every gallon of gas the car consumes, it can travel 25 miles. Understanding this calculation is essential for determining fuel efficiency and helps in making informed decisions regarding vehicle use and gas consumption.

7. If you spend $0.12 per day on kilowatts, how much do you spend in one year?

A. $36.50

B. $43.80

C. $55.20

D. $39.90

To determine the total cost spent on kilowatts in one year, you need to calculate the total amount spent per day multiplied by the number of days in a year. Since there are 365 days in a year, you would perform the following calculation: First, multiply the daily expense by the number of days in a year: \[0.12 \text{ (dollars per day)} \times 365 \text{ (days)} = 43.80 \text{ (dollars)} \] This calculation gives you a total of $43.80 spent on kilowatts over the course of one year. This answer reflects the consistent daily expenditure multiplied by the total number of days in a year, demonstrating a clear method for calculating annual costs based on daily rates.

8. A car travels 60 miles in 1 hour. How far does it travel in 3 hours?

A. 120 miles

B. 150 miles

C. 180 miles

D. 240 miles

To determine how far the car travels in 3 hours, we start by recognizing its speed. The car travels at a speed of 60 miles per hour. To find the total distance traveled over 3 hours, we multiply the speed by the time: Distance = Speed × Time. Substituting in the values: Distance = 60 miles/hour × 3 hours = 180 miles. Thus, the car travels a total of 180 miles in 3 hours. This calculation is based on the consistent speed of the car over the entire duration, making it straightforward to compute the distance for any given time frame.

9. If a TV costs $600 and the tax rate is 7.75%, what was the amount of tax on the TV?

A. $51.75

B. $46.50

C. $48.25

D. $49.50

To determine the amount of tax on the TV priced at $600 with a tax rate of 7.75%, you need to calculate the tax by multiplying the price of the TV by the tax rate expressed as a decimal. First, convert the tax rate from a percentage to a decimal by dividing it by 100: 7.75% = 7.75 / 100 = 0.0775. Next, multiply the price of the TV by the decimal tax rate: Tax amount = Price × Tax rate Tax amount = $600 × 0.0775. When you perform the multiplication, you get: Tax amount = $600 × 0.0775 = $46.50. Therefore, the correct option reflects the accurate calculation of the tax amount at the given price and tax rate.

10. If a person deposits $300 into an account and then withdraws 60% of his account after one month which yields him a withdrawal of $264, how much originally was in his account?

A. $140

B. $360

C. $300

D. $264

To find the original amount in the account before the withdrawal, we need to understand how the withdrawal amount relates to the percentage withdrawn. The person initially deposits $300 into the account. After one month, he withdraws 60% of the total amount in the account. The problem states that this withdrawal amounts to $264. To determine the total amount in the account after the deposit and before the withdrawal, we set up the equation based on the withdrawal percentage. If the total amount in the account is represented as \(x \), then: \[0.60x = 264 \] To find \(x \), we divide both sides of the equation by 0.60: \[x = \frac{264}{0.60} \] \[x = 440 \] Therefore, the total amount in the account before the withdrawal was $440. The original deposit is $300, and the account must have gained an additional amount to reach $440 before the withdrawal. To find how much was gained, we subtract the original deposit from the total amount: \[440 - 300 = 140 \] Thus, the question asks for the original amount in the account, which is $440

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://afct-arithmeticreasoning.examzify.com

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