

ARCHER PHARMACOLOGY – DOSAGE CALCULATION AND MEDICATION ADMINISTRATION PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

[https://
archerpharmdosagecalcmadmin.examzify.com](https://archerpharmdosagecalcmadmin.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. A 1000 mL IV bag is to be infused over 12 hours. What is the rate in mL/hr?**
 - A. 83 mL/hr
 - B. 100 mL/hr
 - C. 72 mL/hr
 - D. 81 mL/hr

- 2. A stroke patient weighing 257 pounds is prescribed alteplase at 0.9 mg/kg. What is the calculated dose in milligrams (before applying any maximum)?**
 - A. 90 mg
 - B. 105 mg
 - C. 110 mg
 - D. 120 mg

- 3. A tablet is 325 mg. How many tablets are needed for a 975 mg dose?**
 - A. 2 tablets
 - B. 3 tablets
 - C. 4 tablets
 - D. 5 tablets

- 4. A client receiving IV fluids through a peripheral venous access device shows swelling and tenderness at the infusion site. What action should you take first?**
 - A. Stop the infusion and remove the PVAD
 - B. Remove the dressing and reposition the PVAD
 - C. Instruct the client to perform range of motion activities in the affected arm
 - D. Place the arm in a dependent position

- 5. A patient needs to infuse 500 mL over 2 hours. What is the rate in mL/hr?**
 - A. 250 mL/hr
 - B. 150 mL/hr
 - C. 200 mL/hr
 - D. 100 mL/hr

6. A primary healthcare provider orders 0.1 units/kg of regular insulin as a bolus. The patient weighs 256 lb. How many units should be given? Round to the nearest whole number.
- A. 10 units
 - B. 11 units
 - C. 12 units
 - D. 13 units
7. PHCP prescribes ondansetron 0.15 mg/kg IV to a pediatric client who weighs 40 lb. The medication label reads 2 mg/mL. How many milliliters will the nurse administer? Round to the nearest tenth.
- A. 0.9 mL
 - B. 1.0 mL
 - C. 1.4 mL
 - D. 2.0 mL
8. The nurse is to administer 6,000 units of heparin subcutaneously. The vial reads 10,000 units per mL. How many milliliters should be administered?
- A. 0.6 mL
 - B. 0.5 mL
 - C. 1.0 mL
 - D. 0.4 mL
9. For peripheral IV catheter insertion, at what angle is the catheter typically inserted?
- A. 5-10 degrees
 - B. 15-30 degrees
 - C. 45-60 degrees
 - D. 75-90 degrees
10. A 1000 mL IV bag is to be infused over 24 hours. What is the rate in mL/hr?
- A. 41.7 mL/hr
 - B. 50 mL/hr
 - C. 83 mL/hr
 - D. 33 mL/hr

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. A 1000 mL IV bag is to be infused over 12 hours. What is the rate in mL/hr?

- A. 83 mL/hr**
- B. 100 mL/hr
- C. 72 mL/hr
- D. 81 mL/hr

You determine the rate by dividing the total volume by the total time. A 1000 mL bag over 12 hours gives $1000 \div 12 = 83.33$ mL per hour. Rounding to the nearest whole mL per hour yields 83 mL/hr, which matches the given option. If you used 100 mL/hr, it would finish in about 10 hours; 72 mL/hr would take about 13.9 hours; 81 mL/hr would take about 12.35 hours—slightly longer or shorter than 12 hours.

2. A stroke patient weighing 257 pounds is prescribed alteplase at 0.9 mg/kg. What is the calculated dose in milligrams (before applying any maximum)?

- A. 90 mg
- B. 105 mg**
- C. 110 mg
- D. 120 mg

The dose is based on body weight in kilograms, using a mg per kilogram order, so you first convert pounds to kilograms and then multiply by 0.9 mg/kg. Convert weight: $257 \text{ pounds} \div 2.2046 \approx 116.6 \text{ kg}$. Dose: $116.6 \text{ kg} \times 0.9 \text{ mg/kg} \approx 104.94 \text{ mg}$, which rounds to 105 mg. In this context, the calculated dose before any maximum is about 105 mg. In practice, however, alteplase for stroke is capped at a maximum dose (90 mg). So while the computed value is 105 mg, the actual administered dose would be limited to 90 mg due to the maximum.

3. A tablet is 325 mg. How many tablets are needed for a 975 mg dose?

- A. 2 tablets
- B. 3 tablets**
- C. 4 tablets
- D. 5 tablets

Calculate how many tablets are needed by using the strength per tablet. Each tablet provides 325 mg, so the number of tablets equals the total dose divided by the tablet strength: $975 \text{ mg} \div 325 \text{ mg} = 3$. Multiplying back confirms the dose: $3 \times 325 \text{ mg} = 975 \text{ mg}$. Since the result is a whole number, no partial tablet is required.

4. A client receiving IV fluids through a peripheral venous access device shows swelling and tenderness at the infusion site. What action should you take first?

A. Stop the infusion and remove the PVAD

B. Remove the dressing and reposition the PVAD

C. Instruct the client to perform range of motion activities in the affected arm

D. Place the arm in a dependent position

Swelling and tenderness at the IV site point to infiltration—the IV fluid is leaking into surrounding tissue. The first action must be to stop the infusion and remove the IV cannula to prevent any further tissue exposure and damage. Once the device is out, elevate the limb to reduce swelling, inspect the site for signs of infiltration (color, temperature, pain), and follow your facility's protocol for ongoing care or redeployment of IV access. The other actions wouldn't stop the ongoing leakage or would delay proper management and could worsen tissue injury.

5. A patient needs to infuse 500 mL over 2 hours. What is the rate in mL/hr?

A. 250 mL/hr

B. 150 mL/hr

C. 200 mL/hr

D. 100 mL/hr

Infusion rate is the amount of fluid delivered per hour. To find it, divide the total volume by the total time in hours. For 500 mL over 2 hours, $500 \div 2 = 250$, so the rate is 250 mL per hour. This means the pump should be set to deliver 250 mL each hour. As a quick check, $250 \text{ mL/hr} \times 2 \text{ hours} = 500 \text{ mL}$, which matches the prescribed volume. If you try other rates, they wouldn't deliver the correct total in 2 hours (for example, 150 mL/hr would give 750 mL in 2 hours, 200 mL/hr would give 400 mL, etc.).

6. A primary healthcare provider orders 0.1 units/kg of regular insulin as a bolus. The patient weighs 256 lb. How many units should be given? Round to the nearest whole number.

A. 10 units

B. 11 units

C. 12 units

D. 13 units

We convert weight to kilograms because the dose is given per kilogram. Using $1 \text{ kg} \approx 2.205 \text{ lb}$, $256 \text{ lb} \approx 256 \div 2.205 \approx 116 \text{ kg}$. Multiply by 0.1 units/kg: $0.1 \times 116 \approx 11.6 \text{ units}$. Rounding to the nearest whole unit gives 12 units. So the bolus dose is about 12 units.

7. PHCP prescribes ondansetron 0.15 mg/kg IV to a pediatric client who weighs 40 lb. The medication label reads 2 mg/mL. How many milliliters will the nurse administer? Round to the nearest tenth.

- A. 0.9 mL
- B. 1.0 mL
- C. 1.4 mL**
- D. 2.0 mL

Calculating pediatric doses uses mg/kg, then convert weight to kilograms and compute the total milligrams, followed by converting to milliliters using the medication's concentration. A weight of 40 lb is about 18.14 kg. The ordered dose is 0.15 mg/kg, so the total dose is $18.14 \times 0.15 \approx 2.72$ mg. The solution is 2 mg/mL, so the required volume is $2.72 \div 2 = 1.36$ mL, which rounds to 1.4 mL. Therefore, administer 1.4 mL.

8. The nurse is to administer 6,000 units of heparin subcutaneously. The vial reads 10,000 units per mL. How many milliliters should be administered?

- A. 0.6 mL**
- B. 0.5 mL
- C. 1.0 mL
- D. 0.4 mL

When you have a dose to give in units and a stock concentration in units per mL, you convert to milliliters by dividing the desired units by the concentration. Here, 6,000 units divided by 10,000 units per mL equals 0.6 mL. So you should administer 0.6 mL. Why this fits: $0.6 \text{ mL} \times 10,000 \text{ U/mL} = 6,000 \text{ U}$, matching the prescribed amount. If you used 0.5 mL, you'd deliver 5,000 U; if you used 1.0 mL, you'd deliver 10,000 U; and if you used 0.4 mL, you'd deliver 4,000 U. None of those meet the 6,000-unit dose.

9. For peripheral IV catheter insertion, at what angle is the catheter typically inserted?

- A. 5-10 degrees
- B. 15-30 degrees**
- C. 45-60 degrees
- D. 75-90 degrees

Entering a peripheral vein with the catheter at a shallow angle helps you align with the vein and minimize tissue trauma. The typical starting angle is about 15–30 degrees to the skin. This range is shallow enough to enter the vein without puncturing the back wall or skimming through surrounding tissue, yet steep enough to find and cannulate the vein reliably. If you go in too steeply, you risk puncturing the far wall or causing more trauma; if you go in too shallowly, you may miss the vein altogether. Once you see blood return, you can lower the angle as you advance the catheter to seat it smoothly within the vein.

10. A 1000 mL IV bag is to be infused over 24 hours. What is the rate in mL/hr?

A. 41.7 mL/hr

B. 50 mL/hr

C. 83 mL/hr

D. 33 mL/hr

The main idea is to convert total volume into a rate by dividing by the time. Rate = volume / time. Here, 1000 mL over 24 hours gives $1000 \div 24 = 41.666...$ mL per hour. Rounding to one decimal place yields 41.7 mL/hr. If you used 50 mL/hr, you'd deliver 1200 mL in 24 hours; at 83 mL/hr you'd deliver about 1992 mL; at 33 mL/hr you'd deliver about 792 mL. So 41.7 mL/hr matches delivering the full 1000 mL in 24 hours.

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://archerpharmdosagecalcmedadmin.examzify.com>

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

SAMPLE