

Med-Math Dosage Calculations Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

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. An IV order for 1000 mL D5W to infuse at 125 mL/hour with a drop factor of 10 gtt/mL. How many hours will the IV run?
 - A. 6 hours
 - B. 8 hours
 - C. 10 hours
 - D. 12 hours

2. An infusion of 1000 mL D5W to infuse over 24 hours with a drop factor of 20 gtt/mL. What is the flow rate in drops per minute?
 - A. 10 gtt/min
 - B. 14 gtt/min
 - C. 18 gtt/min
 - D. 22 gtt/min

3. How many milligrams are in 250 micrograms?
 - A. 0.25 mg
 - B. 2.5 mg
 - C. 0.025 mg
 - D. 1 mg

4. For a dose of 0.75 g, the solution has a concentration of 125 mg per 5 mL. How many milliliters are needed per dose?
 - A. 10 mL
 - B. 20 mL
 - C. 30 mL
 - D. 40 mL

5. A dose of 60 mg is prescribed. The solution is 10 mg/mL. How many milliliters are required?
 - A. 4 mL
 - B. 6 mL
 - C. 8 mL
 - D. 10 mL

6. Clonazepam 1.5 mg PO in 3 equally divided doses every 8 hr for a client who has seizures. The amount available is clonazepam 0.5 mg tablets. How many tablets should the nurse administer per dose?
- A. 0.5 Tablet
 - B. 1 Tablet
 - C. 1.5 Tablets
 - D. 2 Tablets
7. A patient receives 240 mL of milk, 180 mL of apple juice, and 120 mL of water. What is the total intake in liters?
- A. 0.34 L
 - B. 0.54 L
 - C. 0.64 L
 - D. 0.84 L
8. How many milliliters are in 3 tablespoons?
- A. 15 mL
 - B. 30 mL
 - C. 45 mL
 - D. 60 mL
9. A patient receives 750 mL of D5W over 6 hours with a drop factor of 15 gtt/mL. What is the flow rate in drops per minute?
- A. 28 gtt/min
 - B. 31 gtt/min
 - C. 33 gtt/min
 - D. 36 gtt/min
10. 1 ounce equals how many milliliters?
- A. 15 mL
 - B. 30 mL
 - C. 60 mL
 - D. 45 mL

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. An IV order for 1000 mL D5W to infuse at 125 mL/hour with a drop factor of 10 gtt/mL. How many hours will the IV run?
- A. 6 hours
 - B. 8 hours**
 - C. 10 hours
 - D. 12 hours

When the infusion rate is given in mL per hour, the time the IV will run equals the total volume divided by the rate. So, $1000 \text{ mL} \div 125 \text{ mL/hour} = 8 \text{ hours}$. The drop factor (10 gtt/mL) would be used if you needed the infusion rate in drops per minute, but it isn't needed to determine how many hours the IV will run. If you did convert to drops, $125 \text{ mL/hour} \times 10 \text{ gtt/mL} = 1250 \text{ gtt/hour}$, which is about 20-21 gtt per minute, but that doesn't change the 8-hour run time.

2. An infusion of 1000 mL D5W to infuse over 24 hours with a drop factor of 20 gtt/mL. What is the flow rate in drops per minute?
- A. 10 gtt/min
 - B. 14 gtt/min**
 - C. 18 gtt/min
 - D. 22 gtt/min

The key idea is converting the infusion into drops per minute using the formula: $\text{flow rate (gtt/min)} = (\text{volume in mL} \times \text{drop factor in gtt/mL}) \div (\text{time in minutes})$. Here, 1000 mL over 24 hours means $24 \times 60 = 1440 \text{ minutes}$. With a drop factor of 20 gtt/mL, the total drops to be delivered are $1000 \times 20 = 20,000 \text{ gtt}$. Dividing by 1440 minutes gives $20,000 \div 1440 \approx 13.89 \text{ gtt/min}$, which rounds to 14 gtt/min. This matches the provided option.

3. How many milligrams are in 250 micrograms?
- A. 0.25 mg**
 - B. 2.5 mg
 - C. 0.025 mg
 - D. 1 mg

Converting micrograms to milligrams requires knowing that 1 milligram equals 1000 micrograms. To switch from micrograms to milligrams, divide by 1000. So 250 micrograms becomes $250 \div 1000 = 0.25 \text{ milligrams}$. Think of it as: 1000 micrograms = 1 milligram, so 250 micrograms is a quarter of a milligram. The other nearby values would be 2.5 mg (2500 mcg), 0.025 mg (25 mcg), or 1 mg (1000 mcg), which don't match 250 mcg.

4. For a dose of 0.75 g, the solution has a concentration of 125 mg per 5 mL. How many milliliters are needed per dose?
- A. 10 mL
 - B. 20 mL
 - C. 30 mL**
 - D. 40 mL

Relate the dose to the concentration to find the volume. Convert 0.75 g to mg: $0.75 \text{ g} = 750 \text{ mg}$. The concentration is 125 mg in 5 mL, which is 25 mg per 1 mL. So the volume needed is $750 \text{ mg} \div 25 \text{ mg/mL} = 30 \text{ mL}$. Therefore, 30 mL are needed per dose.

5. A dose of 60 mg is prescribed. The solution is 10 mg/mL. How many milliliters are required?
- A. 4 mL
 - B. 6 mL**
 - C. 8 mL
 - D. 10 mL

When you need to find the volume from a prescribed dose and a solution's strength, use $\text{Volume} = \text{Dose} / \text{Concentration}$. Here, the dose is 60 mg and the concentration is 10 mg per mL. So the volume is $60 \text{ mg} \div 10 \text{ mg/mL} = 6 \text{ mL}$. The units mg cancel, leaving mL, which makes sense because you're measuring how many milliliters contain 60 mg. A quick check: 6 mL at 10 mg/mL delivers $6 \times 10 = 60 \text{ mg}$, matching the prescribed dose. If you used 4, 8, or 10 mL, you'd get 40 mg, 80 mg, or 100 mg, respectively, which don't match the dose.

6. Clonazepam 1.5 mg PO in 3 equally divided doses every 8 hr for a client who has seizures. The amount available is clonazepam 0.5 mg tablets. How many tablets should the nurse administer per dose?
- A. 0.5 Tablet
 - B. 1 Tablet**
 - C. 1.5 Tablets
 - D. 2 Tablets

When a dose is ordered to be given in several equal administrations, first find the amount to give at each administration by dividing the total amount by the number of doses. Here, 1.5 mg is to be given in 3 equal doses, so each dose is $1.5 \text{ mg} \div 3 = 0.5 \text{ mg}$ per dose. With tablets that are 0.5 mg each, you need $0.5 \text{ mg} \div 0.5 \text{ mg per tablet} = 1 \text{ tablet per dose}$. So administer one 0.5 mg tablet every 8 hours.

7. A patient receives 240 mL of milk, 180 mL of apple juice, and 120 mL of water. What is the total intake in liters?
- A. 0.34 L
 - B. 0.54 L**
 - C. 0.64 L
 - D. 0.84 L

Total intake is found by adding the three fluid amounts and then converting to liters. Add 240 mL, 180 mL, and 120 mL to get 540 mL. Convert to liters by dividing by 1000: $540 \text{ mL} \times (1 \text{ L} / 1000 \text{ mL}) = 0.54 \text{ L}$. So the total intake is 0.54 L. (For reference, 0.34 L would be 340 mL, 0.64 L would be 640 mL, and 0.84 L would be 840 mL.)

8. How many milliliters are in 3 tablespoons?
- A. 15 mL
 - B. 30 mL
 - C. 45 mL**
 - D. 60 mL

Converting between tablespoons and milliliters is what this question tests. A standard US tablespoon equals 15 milliliters. Multiply by 3 for three tablespoons: $3 \times 15 \text{ mL} = 45 \text{ mL}$. So three tablespoons contain 45 milliliters. The other amounts would correspond to 1, 2, or 4 tablespoons (15 mL, 30 mL, and 60 mL respectively), which don't match three tablespoons.

9. A patient receives 750 mL of D5W over 6 hours with a drop factor of 15 gtt/mL. What is the flow rate in drops per minute?
- A. 28 gtt/min
 - B. 31 gtt/min**
 - C. 33 gtt/min
 - D. 36 gtt/min

Flow rate in drops per minute is found by turning the administered volume into drops and dividing by the total running time in minutes. Use the formula: $\text{rate (gtt/min)} = (\text{volume in mL} \times \text{drop factor in gtt/mL}) \div (\text{time in minutes})$. Compute: $750 \text{ mL} \times 15 \text{ gtt/mL} = 11,250 \text{ drops total}$. The time is 6 hours, which is $6 \times 60 = 360 \text{ minutes}$. So the rate is $11,250 \div 360 = 31.25 \text{ gtt/min}$, which rounds to 31 gtt/min. This matches a practical IV rate, since you typically round to the nearest whole drop per minute when setting manual drip rates.

10. 1 ounce equals how many milliliters?

- A. 15 mL
- B. 30 mL**
- C. 60 mL
- D. 45 mL

Converting ounces to milliliters relies on the fluid ounce conversion: 1 fluid ounce is about 29.57 milliliters. In medical practice, it's common to round to the nearest whole milliliter, so 1 fluid ounce is treated as 30 mL. Therefore, the equivalent of one ounce in milliliters is 30 mL ($1 \text{ oz} \times 29.57 \text{ mL/oz} \approx 29.6 \text{ mL}$, rounding to 30 mL). The other numbers correspond to different amounts (half an ounce, 1.5 ounces, or 2 ounces) and aren't equal to one ounce.

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://medmathdosagecalc.examzify.com>

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

SAMPLE