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MEDICAL DOSAGE CALCULATION

Math for Nurses: Ensuring Patient Safety through Safe Medication Dosage

Workbook

Medical Dosage Calculation : Math for Nurses: Ensuring Patient Safety through Safe Medication Dosage Workbook.

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By
Books Prohealth

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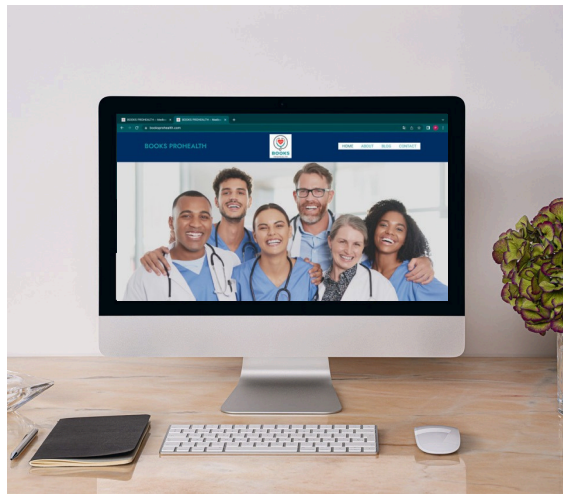
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Introduction

Welcome to the Medical Dosage Calculation Workbook! This workbook is designed to help healthcare professionals, including nursing students and practicing nurses, develop their skills in accurately calculating medication dosages.

Medication dosage calculation is a critical skill for healthcare professionals, as it ensures that patients receive the right amount of medication for their specific needs. Accuracy in dosage calculation is essential to prevent medication errors and promote patient safety.

In this workbook, you will find a comprehensive collection of dosage calculation exercises and practice problems.

Whether you are a nursing student preparing for exams or a practicing nurse looking to sharpen your skills, this workbook will serve as a valuable resource to strengthen your knowledge and abilities in medical dosage calculation.

If you have not yet acquired our Medical Dosage Calculation manual and are struggling with some chapters and questions, please reach out to us at **booksprohealth.com**. We will gladly send you specific chapters from the manual to assist you in your learning process.

Best wishes on your learning journey!

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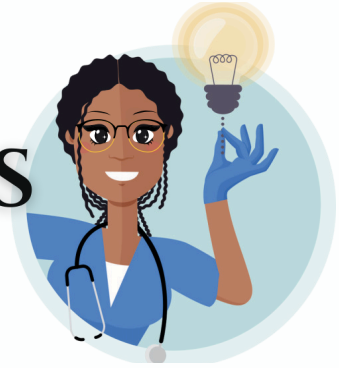
1. Safety in Medication Administration

1. Which of the following is NOT a recommended approach for ensuring safety in medication administration?
- A. Double-checking medication calculations before administration
- B. Documenting medication administration immediately after giving the medication
- C. Administering medications without verifying patient identification
- D. Using barcode scanning technology to verify medication and patient information

2. What is the purpose of the "five rights" of medication administration?
- A. To ensure accurate documentation of medication administration
- B. To prevent medication errors and promote patient safety
- C. To determine the appropriate dosage of medication
- D. To educate patients about their medications

3. True or False: Medication reconciliation is the process of comparing a patient's current medication orders with all of the medications that the patient is actually taking.
- A. True
- B. False

* — Types of multiple-choice questions

4. Which of the following is an example of a high-alert medication?
   A. Acetaminophen (Tylenol)
   B. Insulin
   C. Vitamin C
   D. Ibuprofen (Advil)

5. What is the purpose of the "two identifiers" rule in medication administration?
   A. To ensure that the correct medication is administered to the correct patient
   B. To prevent medication waste
   C. To verify the expiration date of the medication
   D. To determine the appropriate route of medication administration

6. Which of the following is an example of a medication error?
   A. Administering medication to the wrong patient
   B. Documenting medication administration immediately after giving the medication
   C. Double-checking medication calculations before administration
   D. Using barcode scanning technology to verify medication and patient information

7. True or False: It is acceptable to crush any medication for administration if a patient has difficulty swallowing.
   A. True
   B. False

8. Which of the following is an example of a medication reconciliation error?
   A. Not documenting medication administration immediately after giving the medication
   B. Administering medication to the wrong patient
   C. Failing to compare a patient's current medication orders with all of the medications that the patient is actually taking
   D. Using barcode scanning technology to verify medication and patient information
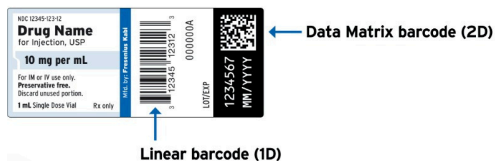
9. What is the purpose of the "read-back" technique in medication administration?
   A. To ensure accurate documentation of medication administration
   B. To prevent medication errors and promote patient safety
   C. To determine the appropriate dosage of medication
   D. To educate patients about their medications

10. True or False: It is acceptable to administer a medication that has been prepared by another healthcare professional without verifying the medication yourself.
    A. True
    B. False

11. Which of the following is NOT one of the Six Rights of Medication Administration?
    A. Right patient
    B. Right time
    C. Right medication
    D. Right dosage
    E. Right documentation

12. The right patient refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct one for the patient

13. Which of the following is NOT part of the Six Rights of Medication Administration?
    A. Right route
    B. Right reason
    C. Right response
    D. Right to refuse

14. The right medication refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct one for the patient

15. The right dosage refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct dose for the patient

16. The right time refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct one for the patient

17. The right route refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is given by the correct route

18. The right response refers to:
   A. Administering the medication at the correct time
   B. Documenting the medication administration accurately
   C. Giving the medication to the correct person
   D. Monitoring the patient for the desired therapeutic effect

19. The right to refuse refers to:
   A. Administering the medication at the correct time
   B. Documenting the medication administration accurately
   C. Giving the medication to the correct person
   D. Respecting the patient's decision to decline medication

20.* Which of the following is one of the Six Rights of Medication Administration?
   A. Right patient
   B. Right time
   C. Right documentation
   D. Right dose
   E. Right prescription

21. The right patient refers to:
   A. Administering the medication at the correct time
   B. Documenting the medication administration accurately
   C. Giving the medication to the correct person
   D. Ensuring the medication is the correct one for the patient

22.* Which of the following is part of the Six Rights of Medication Administration?
    A. Right reason
    B. Right route
    C. Right response
    D. Right to refuse

23.* The right medication refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct one for the patient

24.* The right dosage refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct dose for the patient

25.*The right time refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct one for the patient

26.* The right route refers to:
   A. Administering the medication at the correct time
   B. Documenting the medication administration accurately
   C. Giving the medication to the correct person
   D. Ensuring the medication is given by the correct route

27.* The right response refers to:
   A. Administering the medication at the correct time
   B. Documenting the medication administration accurately
   C. Giving the medication to the correct person
   D. Monitoring the patient for the desired therapeutic effect

28.* The right to refuse refers to:
   A. Administering the medication at the correct time
   B. Documenting the medication administration accurately
   C. Giving the medication to the correct person
   D. Respecting the patient's decision to decline medication

29.* Which of the following is one of the Six Rights of Medication Administration?
   A. Right patient
   B. Right time
   C. Right documentation
   D. Right dosage
   E. Right responsability

30.* The right patient refers to:
    A. Administering the medication at the correct time
    B. Documenting the medication administration accurately
    C. Giving the medication to the correct person
    D. Ensuring the medication is the correct one for the patient

31.* Which of the following is included in a medication order?
    A. Doctor's name
    B. Drug name
    C. Frequency of administration
    D. Route of administration

32.* What does PRN stand for in a medication order?
    A. Prescription Required Now
    B. Pro Re Nata
    C. Pro Regular Necessity
    D. Prescription Recommended Necessarily

33.* Which type of medication order allows the nurse to administer a medication as needed?
    A. Standing order
    B. Single order
    C. PRN order
    D. Stat order

34.* What is the purpose of the "route of administration" component in a medication order?
  A. To specify the time of medication administration
  B. To indicate the frequency of medication administration
  C. To determine the method by which the medication will be given
  D. To identify the name of the medication

35.* What is the purpose of a Medication Administration Record (MAR)?
  A. To document the patient's medical history
  B. To track the patient's vital signs
  C. To record the administration of medications
  D. To monitor the patient's fluid intake and output

36. Which of the following is NOT included in a medication order?
  A. Nurse's name
  B. Name of the medication
  C. Dosage form and strength
  D. Route of administration

37. What does PRN stand for in a medication order?
  A. Electronic MAR
  B. Pro Re Nata
  C. Pro Regular Necessity
  D. Prescription Recommended Necessarily

38. Which type of medication order allows the nurse to administer a medication as needed?
    A. Standing order
    B. Single order
    C. PRN order
    D. Stat order

39. What is the purpose of the "route of administration" component in a medication order?
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    A. To document the patient's medical history
    B. To track the patient's vital signs
    C. To record the administration of medications
    D. To monitor the patient's fluid intake and output

The Six Rights of Medication Administartion

Answers

2. The Drug Label

1. What is the purpose of tall man lettering on a drug label?
    a) To highlight the brand name of the drug
    b) To differentiate between different dosage forms of the drug
    c) To emphasize parts of the drug name that look similar to other drugs
    d) None of the above

2. Which of the following is an example of a dosage form?
    a) Tablet
    b) Capsule
    c) Injection
    d) All of the above

3. What does the dosage strength indicate?
    a) The amount of active ingredient in the drug
    b) The dosage form of the drug
    c) The route of administration for the drug
    d) None of the above

4. What does the route of administration indicate?
    a) The dosage strength of the drug
    b) The dosage form of the drug
    c) The method by which the drug is administered into the body
    d) None of the above

* — Types of multiple-choice questions

5.* Which of the following is an example of a drug label with tall man lettering?
    a) AsPIRIN
    b) tYLENOL
    c) iBUPROFEN
    d) None of the above

6.* What is the purpose of tall man lettering?
    a) To make the drug name more noticeable
    b) To prevent medication errors by highlighting similar-looking drug names
    c) To indicate the dosage strength of the drug
    d) None of the above

7. Which of the following is an example of a dosage form?
    a) Syrup
    b) Ointment
    c) Inhaler
    d) All of the above

8. What does the dosage strength specify?
    a) The size of the drug package
    b) The amount of drug in a specific dosage form
    c) The instructions for administering the drug
    d) None of the above

9. What does the route of administration indicate?
    a) The location where the drug was manufactured
    b) The method by which the drug is taken into the body
    c) The expiration date of the drug
    d) None of the above

10.* Which of the following is an example of a drug label with tall man lettering?
    a) Aspirin
    b) Tylenol
    c) Ibuprofen
    d) None of the above

11.* What is the purpose of tall man lettering?
    a) To make the drug name more aesthetically pleasing
    b) To differentiate between different dosage strengths of the drug
    c) To prevent medication errors by highlighting similar-looking
        drug names
    d) None of the above

12. Which of the following is an example of a dosage form?
    a) Tablet
    b) Capsule
    c) Injection
    d) All of the above

13.* What does the dosage strength indicate?
    a) The amount of active ingredient in the drug
    b) The dosage form of the drug
    c) The route of administration for the drug
    d) None of the above

14.* What does the route of administration indicate?
    a) The dosage strength of the drug
    b) The dosage form of the drug
    c) The method by which the drug is administered into the body
    d) None of the above

15. Which of the following is an example of a drug label with tall man lettering?
    a) DOPamine
    b) aceTOHEXAMIDE
    c) DOxorubicin
    d) None of the above

16. What is the purpose of tall man lettering?
    a) To make the drug name more noticeable
    b) To prevent medication errors by highlighting similar-looking
       drug names
    c) To indicate the dosage strength of the drug
    d) None of the above

17. Which of the following is an example of a dosage form?

   a) Syrup
   b) Ointment
   c) Inhaler
   d) All of the above

18. What does the dosage strength specify?

   a) The size of the drug package
   b) The amount of drug in a specific dosage form
   c) The instructions for administering the drug
   d) None of the above

19. What does the route of administration indicate?

   a) The location where the drug was manufactured
   b) The method by which the drug is taken into the body
   c) The expiration date of the drug
   d) None of the above

20. What is the purpose of a Black Box Warning?

   a) To highlight potential adverse effects of a medication b) To promote the use of a medication
   c) To provide more information about the adverse effects of the drug
   d) To provide storage instructions for a medication

21. What is the role of the FDA in relation to medications?
   a) Conducting clinical trials for new medications
   b) Regulating the manufacturing and distribution of medications
   c) Providing medical advice to healthcare professionals
   d) Administering medications to patients

22. Which type of container is typically used for a single-dose medication?
   a) Vial
   b) Ampule
   c) Bottle
   d) Bag

23. What information can be found on a medication's lot number?
   a) Expiration date
   b) Manufacturer's name
   c) Storage instructions
   d)Batch information

24.*Why is it important to follow storage instructions for medications?
   a) To prevent contamination
   b) To increase the medication's effectiveness
   c)To ensure patient compliance
   d) To minimize side effects

25.* To prevent medication errors, it is recommended to prescribe drugs using only:
   a) Designated with USP
   b) The generic name
   c) The generic and trade names
   d) None of the above

26. What does the manufacturer's name on a medication indicate?
   a) The country of origin
   b) The medication's brand name
   c) The medication's dosage form
   d) The medication's active ingredients

27. Which type of container is typically used for a multi-dose medication?
   a) Vial
   b) Ampule
   c) Bottle
   d) Bag

28.* What is the purpose of a Black Box Warning?
   a) To highlight potential adverse effects of a medication
   b) To promote the use of a medication
   c) To indicate the expiration date of a medication
   d) To provide storage instructions for a medication

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   a) Expiration date
   b) Manufacturer's name
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31.* Which type of container is typically used for a single-dose medication?
   a) Vial
   b) Ampule
   c) Bottle
   d) Bag

32.* What does the manufacturer's name on a medication indicate?
   a) The country of origin
   b) The medication's brand name
   c) The medication's dosage form
   d) The medication's active ingredients

33. Which of the following information is typically included in the storage instructions for medications?
    a) Temperature requirements
    b) Expiration date
    c) Lot number
    d) Administration route

34. What does the lot number on a medication package indicate?
    a) The manufacturer's contact information
    b) The price of the medication
    c) The batch from which the medication was produced
    d) The recommended dosage for the medication

35. Why is it important to store medications according to the specified temperature requirements?
    a) To ensure the medication remains potent and effective
    b) To prevent contamination of the medication
    c) To comply with regulatory guidelines
    d) To minimize the risk of side effects

Fill in the blanks

36. The drug name on the drug label is generic and/or brand: _____

Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

37. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

38. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

39. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

Each tablet contains: Quinidine Sulfate 200 mg.
USUAL DOSAGE: See accompanying literature for complete prescribing information.
Store at 20° to 25°C (68° to 77°F) [see USP Controlled Room Temperature].
LE0027
Rev. 07-2021-00

NDC 42806-513-30
Quinidine Sulfate Tablets, USP
200 mg
Rx Only
30 Tablets

Dispense contents with a child-resistant closure (as required) and in a tight, light-resistant container, as defined in the USP.
Protect from moisture.
KEEP TIGHTLY CLOSED.
KEEP OUT OF THE REACH OF CHILDREN.
Product of Germany

40. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

Store at 20° to 25°C (68° to 77°F); excursions permitted between 15° and 30°C (59° and 86°F) [see USP Controlled Room Temperature].
Dispense in a well-closed, light-resistant container as defined in the USP.

NDC 62756-312-83
Quinapril Tablets, USP
20 mg*
Rx only
30 TABLETS

*Each tablet contains quinapril hydrochloride, USP equivalent to 20 mg quinapril.
DOSAGE AND USE:
See package insert for full prescribing information.
Protect from light.
PGLB0338 PGLB0338 ISS. 07/2009
DNH/DRUGS/138
Batch No.:
Exp.:

41. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

NDC 0074-3956-46
Kaletra®
Lopinavir/Ritonavir
Oral Solution
80 mg/20 mg per mL
160 mL
ALERT: Find out about medicines that should NOT be taken with KALETRA
Attention Pharmacist: Do not cover ALERT box with pharmacy label.
Dispense the enclosed Medication Guide to each patient.

42. The drug name on the drug label is generic and/or
brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

NDC 0074-3289-13

Tarka®

Trandolapril/Verapamil
HCl ER

2 mg/240 mg

100 Tablets

Do not accept if seal
over bottle opening is
broken or missing.
Each tablet contains
2 mg trandolapril and
240 mg verapamil HCl
extended release.
Dispense in
well-closed container
with safety closure.
Usual dose: See package
insert.
Store at 15-25°C
(59-77°F) see USP.

43. The drug name on the drug label is generic and/or
brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

Store at controlled room
temperature 15°-30°C
(59°-86°F).
Protect from light.
Dispense in a well-closed
container as defined in the USP.

DOSAGE AND USE
See accompanying
prescribing information.

*Each tablet contains
quinapril HCl equivalent to
10 mg quinapril.

NDC 0071-0530-23

Accupril®

(Quinapril HCl Tablets)

10 mg*

90 Tablets   Rx only

GTIN: 00300710530232
LOT:/EXP:

44. The drug name on the drug label is generic and/or
brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

Rx ONLY

NDC 0456-1405-01

Bystolic ○.

(nebivolol) tablets

5 mg/tablet

100 TABLETS

Each tablet contains:
nebivolol hydrochloride
equivalent to 5 mg nebivolol.

Keep this and all drugs out of
the reach of children.

Dispense in tight, light-resistant
container as defined in the USP,
using a child-resistant closure.

Store at 20° to 25°C (68° to
77°F). [See USP for Controlled
Room Temperature.]
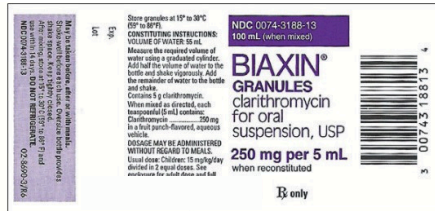
See package insert for dosing
and full Prescribing Information.

45. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

Cozaar® 25 mg
(Losartan Potassium Tablets)

NDC 0006-0951-54

USUAL ADULT DOSAGE: See accompanying circular.
Rx only

Each tablet contains 25 mg of losartan potassium. Store at 25°C (77°F); excursions permitted to 15-30°C (59-86°F) [see USP Controlled Room Temperature]. Keep container tightly closed. Protect from light.
90 Tablets   951
Lot

9721700
901 No.3612

46. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

Store at controlled room temperature 20° to 25°C (68° to 77°F) [see USP].
DOSAGE AND USE:
See accompanying prescribing information.
Each mL contains ibutilide fumarate, 0.1 mg. Also contains sodium chloride, 8.90 mg; sodium acetate trihydrate, 0.189 mg; water for injection. When necessary, pH was adjusted with sodium hydroxide and/or hydrochloric acid.

NDC 0009-3794-01
10 mL Single-Dose Vial
Corvert®
(ibutilide fumarate injection)
1 mg/10 mL
(0.1 mg/mL)
For IV use only
Rx only
Injectables
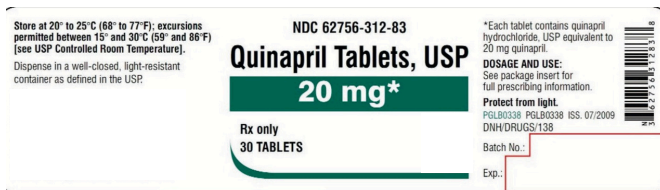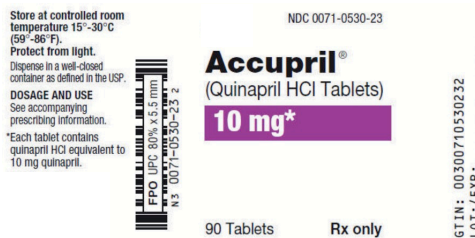
47. The drug name on the drug label is generic and/or brand: _____
Dosage form: _____
Dosage strength: _____
Route(s) of administration: _____

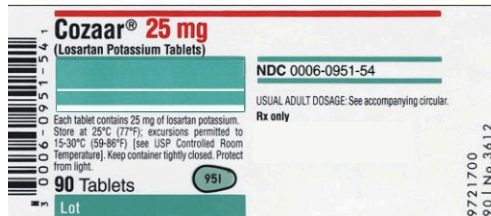2mL Single-dose NDC 0074-1658-02
Fliptop Vial   Rx only
Zemplar®
(paricalcitol) Injection
10 mcg Total (5 mcg/mL)
For I.V. Use.   RL-2135 (05/07)
M'd for: Abbott Labs., N. Chgo., IL 60064 USA

Answers

3. Systems of Measurement

1. Convert 2.5 kilograms to grams.

2. Convert 350 milliliters to liters.

3. Convert 3.75 liters to milliliters.

4. Convert 500 micrograms to milligrams.

5. Convert 0.8 grams to milligrams.

6. Convert 15 centimeters to millimeters.

7. Convert 2.2 pounds to kilograms.

8. Convert 25 milligrams to micrograms.

9. Convert 0.5 liters to milliliters.

10. Convert 45 millimeters to centimeters.

11. Convert 1500 micrograms to milligrams.

12. Convert 0.75 liters to milliliters.

13. Convert 2500 grams to kilograms.

14. Convert 3.5 liters to milliliters.

15. Convert 0.4 milligrams to micrograms.

16. Convert 5 kilograms to grams.

17. Convert 800 milliliters to liters.

18. Convert 4.5 liters to milliliters.

19. Convert 0.3 grams to milligrams.

20. Convert 60 centimeters to millimeters.

21. Which of the following is the correct household to metric equivalent measurement for 1 tablespoon (tbsp)?
    a) 5 mL
    b) 10 mL
    c) 15 mL
    d) 20 mL

22. Convert 2 teaspoons (tsp) to milliliters (mL).
    a) 5 mL
    b) 10 mL
    c) 15 mL
    d) 20 mL

23. A patient is prescribed 0.25 fluid ounces (fl oz) of medication. What is the equivalent measurement in milliliters (mL)?
    a) 5 mL
    b) 10 mL
    c) 15 mL
    d) 20 mL

24. Convert 4 fluid drams (fl dr) to milliliters (mL).
    a) 5 mL
    b) 10 mL
    c) 15 mL
    d) 20 mL

25. A patient is prescribed 8 fluid ounces (fl oz) of medication. What is the equivalent measurement in milliliters (mL)?

   a) 100 mL
   b) 200 mL
   c) 300 mL
   d) 400 mL

26. Which of the following is the correct household to metric equivalent measurement for 1 cup?

   a) 100 mL
   b) 200 mL
   c) 250 mL
   d) 500 mL

27. Convert 3 pints (pt) to liters (L).

   a) 1 L
   b) 1.5 L
   c) 2 L
   d) 2.5 L

28. A patient is prescribed 16 fluid ounces (fl oz) of medication. What is the equivalent measurement in milliliters (mL)?

   a) 200 mL
   b) 300 mL
   c) 400 mL
   d) 500 mL

29. The nurse gives 0.5 oz of a medication. How many mL does the patient receive ?
   a) 1 Tbs equals 3 tsp
   b) 15 mL equals 1 Tbs
   c) 1 oz equals 30 mL
   d) 1 oz equals 6 tsp

30. The patient is instructed to drink one 8 oz glass of water with the medication. How many mL will the patient drink ?
   a) 2 Tbs equals 1 oz
   b) 1 oz equals 30 mL
   c) 3 tsp equals 15 mL
   d) 1oz equals 6 tsp

31. The nurse records that the patient took 675 mL of fluid during the morning. How many ounces did the patient drink ?
   a) 2 Tbs equals 1 oz
   b) 1 oz equals 30 mL
   c) 3 tsp equals 15 mL
   d) 1 oz equals 6 tsp

32. The order is to give the patient 20 mL of a drug. How many tsp does the patient receive ?
   a) 5 mL equals 1 tsp
   b) 15 mL equals 3 tsp
   c) 1 oz equals 30 mL
   d) 2 Tbs equals 6 tsp

Answers

4. Linear Ratio and Proportion

1. Which of the following is the correct calculation using the linear ratio and proportion method for dosage calculation?
   a) The ordered dose is 500 mg. The available dose is 250 mg. The calculation is (500 mg / 250 mg) x 1 tablet = 2 tablets.
   b) The ordered dose is 0.5 g. The available dose is 1 g. The calculation is (0.5 g / 1 g) x 1 tablet = 0.5 tablet.
   c) The ordered dose is 100 mg. The available dose is 50 mg. The calculation is (100 mg / 50 mg) x 1 tablet = 0.5 tablet.
   d) The ordered dose is 250 mg. The available dose is 500 mg. The calculation is (250 mg / 500 mg) x 1 tablet = 0.5 tablet.

2. The ordered dose is 0.25 mg. The available dose is 0.5 mg. The calculation is (0.25 mg / 0.5 mg) x 1 tablet = ?
   a) 0.25 tablet
   b) 0.5 tablet
   c) 1 tablet
   d) 2 tablets

3. The ordered dose is 2.5 mL. The available dose is 5 mL. The calculation is (2.5 mL / 5 mL) x 1 teaspoon = ?
   a) 0.5 teaspoon
   b) 1 teaspoon
   c) 1.5 teaspoons
   d) 2 teaspoons

4. The ordered dose is 100 mcg. The available dose is 50 mcg. The calculation is (100 mcg / 50 mcg) x 1 tablet = ?
   a) 0.5 tablet
   b) 1 tablet
   c) 1.5 tablets
   d) 2 tablets

5. The ordered dose is 50 mg. The available dose is 100 mg. The calculation is (50 mg / 100 mg) x 1 tablet = ?
   a) 0.25 tablet
   b) 0.5 tablet
   c) 1 tablet
   d) 2 tablets

6. The ordered dose is 0.75 g. The available dose is 1.5 g. The calculation is (0.75 g / 1.5 g) x 1 tablet = ?
   a) 0.25 tablet
   b) 0.5 tablet
   c) 1 tablet
   d) 2 tablets

7. The ordered dose is 25 mcg. The available dose is 50 mcg. The calculation is (25 mcg / 50 mcg) x 1 tablet = ?
   a) 0.25 tablet
   b) 0.5 tablet
   c) 1 tablet
   d) 2 tablets

8. The ordered dose is 0.125 g. The available dose is 0.25 g. The calculation is (0.125 g / 0.25 g) x 1 tablet = ?
   a) 0.25 tablet
   b) 0.5 tablet
   c) 1 tablet
   d) 2 tablets

9. The ordered dose is 1.5 mL. The available dose is 3 mL. The calculation is (1.5 mL / 3 mL) x 1 teaspoon = ?
   a) 0.25 teaspoon
   b) 0.5 teaspoon
   c) 1 teaspoon
   d) 2 teaspoons

10. The ordered dose is 0.1 mg. The available dose is 0.2 mg. The calculation is (0.1 mg / 0.2 mg) x 1 tablet = ?
   a) 0.25 tablet
   b) 0.5 tablet
   c) 1 tablet
   d) 2 tablets

11. The ordered dose is 50 mg. The available dose is 100 mg. The calculation is (50 mg / 100 mg) x 1 tablet = ?
   a) 0.5 tablet
   b) 1 tablet
   c) 2 tablets
   d) 0.25 tablet

12. The ordered dose is 500 mg. The available dose is 250 mg. The calculation is (500 mg / 250 mg) x 1 tablet = ?
   a) 2 tablets
   b) 1 tablet
   c) 0.5 tablet
   d) 0.25 tablet

13. The ordered dose is 0.5 g. The available dose is 1 g. The calculation is (0.5 g / 1 g) x 1 tablet = ?
   a) 0.5 tablet
   b) 1 tablet
   c) 2 tablets
   d) 0.25 tablet

14. The ordered dose is 100 mg. The available dose is 50 mg. The calculation is (100 mg / 50 mg) x 1 tablet = ?
   a) 2 tablets
   b) 1 tablet
   c) 0.5 tablet
   d) 0.25 tablet

15. The ordered dose is 250 mg. The available dose is 500 mg. The calculation is (250 mg / 500 mg) x 1 tablet = ?
   a) 0.5 tablet
   b) 1 tablet
   c) 2 tablets
   d) 0.25 tablet

16. The ordered dose is 0.75 g. The available dose is 1.5 g. The calculation is (0.75 g / 1.5 g) x 1 tablet = ?

   a) 0.5 tablet
   b) 1 tablet
   c) 2 tablets
   d) 0.25 tablet

17. The ordered dose is 25 mcg. The available dose is 50 mcg. The calculation is (25 mcg / 50 mcg) x 1 tablet = ?

   a) 0.5 tablet
   b) 0.25 tablet
   c) 1 tablet
   d) 2 tablets

18. The ordered dose is 0.125 g. The available dose is 0.25 g. The calculation is (0.125 g / 0.25 g) x 1 tablet = ?

   a) 0.5 tablet
   b) 1 tablet
   c) 2 tablets
   d) 0.25 tablet

19. The ordered dose is 1.5 mL. The available dose is 3 mL. The calculation is (1.5 mL / 3 mL) x 1 teaspoon = ?
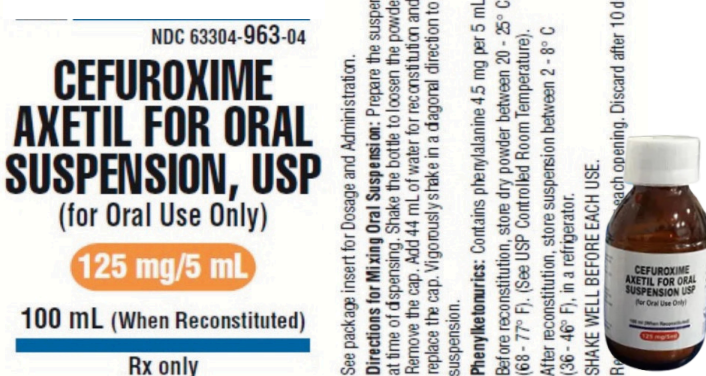
   a) 0.5 teaspoon
   b) 1 teaspoon
   c) 2 teaspoons
   d) 0.25 teaspoon

20. The ordered dose is 0.1 mg. The available dose is 0.2 mg. The calculation is (0.1 mg / 0.2 mg) x 1 tablet = ?

    a) 0.5 tablet

    b) 1 tablet

    c) 2 tablets

    d) 0.25 tablet

Write the linear ratio that expresses the correct dosage strength for the medications below:

21.

Store at controlled room temperature, 59° to 86°F (15° to 30°C).
PROTECT FROM LIGHT.
Dispense in tight (USP), light-resistant, child resistant containers.
DOSAGE AND USE
See accompanying prescribing information.
* Each tablet contains amlodipine besylate equivalent to 2.5 mg amlodipine.

NY, NY 10017

FPO (80%)
N3 0069-1520-68 0

Pfizer   NDC 0069-1520-68

Norvasc ®
(amlodipine besylate)
tablets

2.5 mg*

90 Tablets   Rx only

22.

NDC 63304-**963**-04

CEFUROXIME AXETIL FOR ORAL SUSPENSION, USP
(for Oral Use Only)

125 mg/5 mL

100 mL (When Reconstituted)

Rx only

See package insert for Dosage and Administration.
Directions for Mixing Oral Suspension: Prepare the suspension at time of dispensing. Shake the bottle to loosen the powder. Remove the cap. Add 44 mL of water for reconstitution and replace the cap. Vigorously shake in a diagonal direction to form suspension.
Phenylketonurics: Contains phenylalanine 4.5 mg per 5 mL.
Before reconstitution, store dry powder between 20 - 25° C (68 - 77° F). (See USP Controlled Room Temperature).
After reconstitution, store suspension between 2 - 8° C (36 - 46° F), in a refrigerator.
SHAKE WELL BEFORE EACH USE.
Reach opening. Discard after 10 days.
0507

CEFUROXIME
AXETIL FOR ORAL
SUSPENSION USP
(for Oral Use Only)

125 mg/5mL

23.

NDC 0143-9787-10

ENALAPRILAT
INJECTION, USP

1.25 mg/mL

ANHYDROUS EQUIVALENT

FOR IV USE ONLY
Rx ONLY

1 mL Single Use Vial

Store at 25°C (77°F); excursions
permitted to 15° to 30°C (59° to 8
[see USP Controlled Room
Temperature].

USUAL DOSAGE: See Package In

24.

Store at controlled room
temperature 15°-30°C
(59°-86°F).
Protect from light.
Dispense in a well-closed
container as defined in the USP.

DOSAGE AND USE
See accompanying
prescribing information.

*Each tablet contains
quinapril HCl equivalent to
10 mg quinapril.

NDC 0071-0530-23

Accupril®
(Quinapril HCl Tablets)
10 mg*

90 Tablets   **Rx only**

GTIN: 00300710530232
LOT:/EXP:

25.

Store at controlled room
temperature 20° to 25°C
(68° to 77°F) [see USP].
DOSAGE AND USE:
See accompanying prescribing
information.

Each mL contains ibutilide fumarate,
0.1 mg. Also contains sodium chloride,
8.90 mg; sodium acetate trihydrate,
0.189 mg; water for injection. When
necessary, pH was adjusted with
sodium hydroxide and/or hydrochloric
acid.

NDC 0009-3794-01
10 mL Single-Dose Vial

Corvert®
(ibutilide fumarate injection
1 mg/10 mL
(0.1 mg/mL)

For IV use only

Rx onl

Injectables

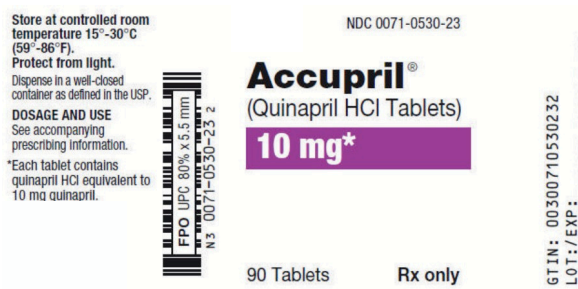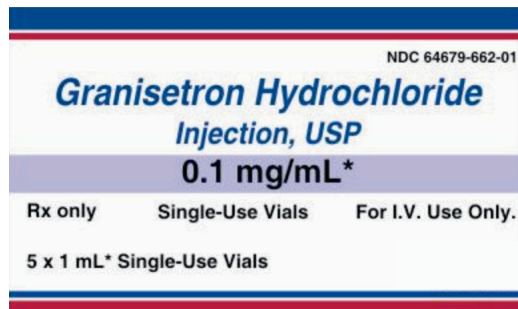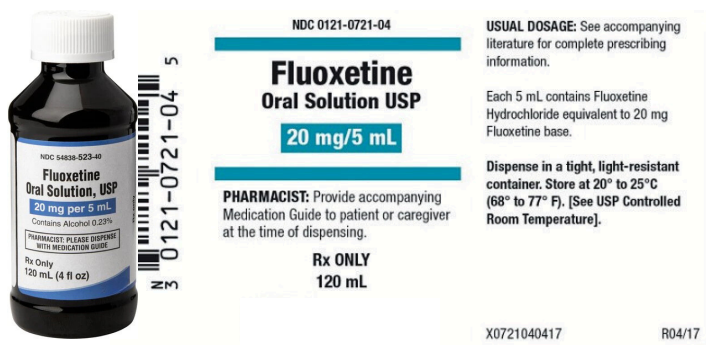26. The doctor orders Granisetron 450 mcg IV 30 minutes prior to chemotherapy. The nurse has the following vials of Granisetron. How many mL will the nurse give to the patient?

NDC 64679-662-01

Granisetron Hydrochloride
Injection, USP
0.1 mg/mL*

Rx only   Single-Use Vials   For I.V. Use Only.

5 x 1 mL* Single-Use Vials

27. The nurse practitioner orders 60 mg of Fluoxetine Oral Solution p.o. daily for the patient. The pharmacy sends the following bottle of Fluoxetine. How many tsp will the patient receive ?

NDC 0121-0721-04

Fluoxetine
Oral Solution USP

20 mg/5 mL

PHARMACIST: Provide accompanying Medication Guide to patient or caregiver at the time of dispensing.

Rx ONLY
120 mL

USUAL DOSAGE: See accompanying literature for complete prescribing information.

Each 5 mL contains Fluoxetine Hydrochloride equivalent to 20 mg Fluoxetine base.

Dispense in a tight, light-resistant container. Store at 20° to 25°C (68° to 77° F). [See USP Controlled Room Temperature].

X0721040417   R04/17

NDC 54838-523-40
Fluoxetine
Oral Solution, USP
20 mg per 5 mL
Contains Alcohol 0.23%
PHARMACIST: PLEASE DISPENSE WITH MEDICATION GUIDE
Rx Only
120 mL (4 fl oz)

28. The physician's order is for 0.01 g p.o. each morning. How many tablets will the nurse instruct the patient to take?

Store at controlled room temperature 15°-30°C (59°-86°F).
Protect from light.
Dispense in a well-closed container as defined in the USP.
DOSAGE AND USE
See accompanying prescribing information.
*Each tablet contains 5 mg of quinapril (equivalent to 5.416 mg quinapril hydrochloride).

NDC 0071-1205-23

Accupril®
(quinapril) tablets

5 mg*

90 Tablets   Rx only

EXP:
LOT:
SN

29. The order is for METHYLPREDnisolone Acetate 30 mg IM now. The pharmacy sends the following vial of METHYLPREDnisolone Acetate. How many mL will the nurse administer ?

NDC 70121-1573-1
MethylPREDNISolone Acetate Injectable Suspension, USP
40 mg/mL
1 mL Single-Dose Vial
Rx only

For Intramuscular, Intrasynovial and Soft Tissue Injection Only.
NOT for Intravenous Use.
DOSAGE AND USE: See accompanying prescribing information.
Shake well immediately before using.

Unvarnished Area for, Lot. & Exp. (7 x 18 mm)

30. The patient tells the nurse that he takes 12 mL of Ceftin four times daily. How many mg does the patient receive per dose ?

NDC 0173-0741-10
Rx only

Ceftin® for Oral Suspension
(cefuroxime axetil for oral suspension)
For Oral Use Only
250 mg per 5 mL   50 mL (when reconstituted)

Contains 3.6 g of cefuroxime axetil equivalent to 3 g of cefuroxime.
Phenylketonurics: Contains Phenylalanine 25.2 mg per 5 mL (1 teaspoonful) constituted suspension.
See package insert for Dosage and Administration.
Directions for Mixing Oral Suspension: Prepare the suspension at time of dispensing. Shake the bottle to loosen the powder. Remove the cap. Add 19 mL of water for reconstitution and replace the cap. Invert bottle and vigorously rock it from side to side so that water rises through the powder. Once the sound of the powder against the bottle disappears, turn the bottle upright and vigorously shake it in a diagonal direction.
Before reconstitution, store dry powder between 2° and 30°C (36° and 86°F). After reconstitution, store suspension between 2° and 8°C (36° and 46°F), in a refrigerator. SHAKE WELL BEFORE EACH USE. Replace cap securely after each opening. Discard after 10 days.

Answers

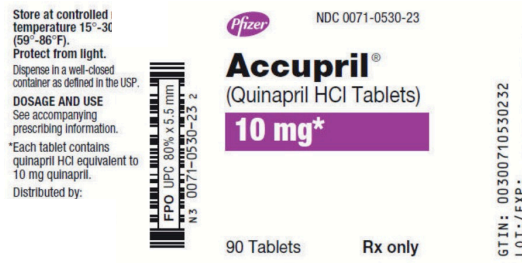# 5. Fractional Ratio and Proportion

Write the fractional ratio that expresses the correct dosage strength for the medications below:

1.

NDC 0143-9787-10
1 mL Single Use Vial
ENALAPRILAT
INJECTION, USP
Store at 25°C (77°F); excursions permitted to 15° to 30°C (59° to 86°) [see USP Controlled Room Temperature].
USUAL DOSAGE: See Package Insert
1.25 mg/mL
ANHYDROUS EQUIVALENT
FOR IV USE ONLY
Rx ONLY

2.

Store at controlled temperature 15°-30 (59°-86°F).
Protect from light.
Dispense in a well-closed container as defined in the USP.
DOSAGE AND USE
See accompanying prescribing information.
*Each tablet contains quinapril HCl equivalent to 10 mg quinapril.
Distributed by:

NDC 0071-0530-23
Pfizer
Accupril®
(Quinapril HCl Tablets)
10 mg*
90 Tablets   Rx only

3.

Store at controlled room temperature 20° to 25°C (68° to 77°F) [see USP].
DOSAGE AND USE:
See accompanying prescribing information.
Each mL contains ibutilide fumarate, 0.1 mg. Also contains sodium chloride, 8.90 mg; sodium acetate trihydrate, 0.189 mg; water for injection. When necessary, pH was adjusted with sodium hydroxide and/or hydrochloric acid.

NDC 0009-3794-01
10 mL Single-Dose Vial
Corvert®
(ibutilide fumarate injection)
1 mg/10 mL
(0.1 mg/mL)
For IV use only
Rx only

4.

NDC 0121-0721-04

Fluoxetine
Oral Solution USP

20 mg/5 mL

PHARMACIST: Provide accompanying Medication Guide to patient or caregiver at the time of dispensing.

Rx ONLY
120 mL

N3 0121-0721-04 5

USUAL DOSAGE: See accompanying literature for complete prescribing information.

Each 5 mL contains Fluoxetine Hydrochloride equivalent to 20 mg Fluoxetine base.

Dispense in a tight, light-resistant container. Store at 20° to 25°C (68° to 77° F). [See USP Controlled Room Temperature].

X0721040417   R04/17

5.

Store at controlled room temperature, 59° to 86°F (15° to 30°C).

PROTECT FROM LIGHT.

Dispense in tight (USP), light-resistant, child resistant containers.

DOSAGE AND USE
See accompanying prescribing information.

* Each tablet contains amlodipine besylate equivalent to 2.5 mg amlodipine.

FPO (80%)

N3 0069-1520-68 0

NDC 0069-1520-68

Norvasc®
(amlodipine besylate)
tablets

2.5 mg*

90 Tablets   **Rx only**

6.

NDC 63304-963-04

CEFUROXIME
AXETIL FOR ORAL
SUSPENSION, USP
(for Oral Use Only)

125 mg/5 mL

100 mL (When Reconstituted)

Rx only

See package insert for Dosage and Administration.

Directions for Mixing Oral Suspension: Prepare the suspension at time of dispensing. Shake the bottle to loosen the powder. Remove the cap. Add 44 mL of water for reconstitution and replace the cap. Vigorously shake in a diagonal direction to form suspension.

Phenylketonurics: Contains phenylalanine 4.5 mg per 5 mL.

Before reconstitution, store dry powder between 20 - 25° C (68 - 77° F). (See USP Controlled Room Temperature).

After reconstitution, store suspension between 2 - 8° C (36 - 46° F), in a refrigerator.

SHAKE WELL BEFORE EACH USE.

Replace cap securely after each opening. Discard after 10 days.

0507

7.

NDC 70882-130-21

Metronidazole
Tablets, USP

250 mg*

Rx only
21 Tablets

For product inquiries,
please call CTT at (844) 810-0004

250 mg* 250 mg* 250 mg* 250 mg* 250 mg*

*Each film-coated tablet contains metronidazole USP 250 mg.

DOSAGE AND USE: See accompanying prescribing information.

Store below 25°C (77°F).
Protect from light.
Dispense in tight, light-resistant, child-resistant containers (USP).

KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN

Revised 08/2017

11034

70882 13021

8.

NDC 64679-662-01

Granisetron Hydrochloride
Injection, USP

0.1 mg/mL*

Rx only   Single-Use Vials   For I.V. Use Only.

5 x 1 mL* Single-Use Vials

9.

NDC 65862-698-20

Rx only

Cefuroxime Axetil
Tablets, USP
125 mg*

20 Tablets

*Each film-coated tablet contains: Cefuroxime Axetil USP (amorphous) equivalent to 125 mg of cefuroxime.

See package insert for Dosage and Administration.

Store at 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature].

Replace cap securely after each opening.

Keep this and all drugs out of the reach of children.

Determine which proportion is set up correctly. Calculate the answer:

10. The order is for 20 mg of a medication. The dosage strength of the medication is 5 mg in one drop. How many drops will the nurse administer?

A. $\dfrac{20 \text{ mg}}{1 \text{ drop}} = \dfrac{5 \text{ mg}}{x \text{ drop}}$

B. $\dfrac{5 \text{ mg}}{1 \text{ drop}} = \dfrac{20 \text{ mg}}{x \text{ drop}}$

11. The pharmacy sends a drug labeled 30 mg per tablet. The nurse administers 0.5 tablet. How many mg did the nurse administer?

A. $\dfrac{30 \text{ mg}}{1 \text{ tablet}} = \dfrac{x \text{ mg}}{0.5 \text{ tablet}}$

B. $\dfrac{1 \text{ table}}{30 \text{ mg}} = \dfrac{0.5 \text{ mg}}{x \text{ tablet}}$

12. The patient is to receive 300 grams of a drug daily. The drug bottle is labeled 600 grams in 1 mL. How many mL should the nurse administer?

A. $\dfrac{300 \text{ gram}}{x \text{ mL}} = \dfrac{1 \text{ mL}}{600 \text{ gram}}$

B. $\dfrac{600 \text{ gram}}{1 \text{ mL}} = \dfrac{300 \text{ gram}}{x \text{ mL}}$

13. The patient takes 4 doses of a medication each day. The medication contains 3 mg in each dose. The nurse needs to know how many mg the patient takes each day.

A. $\dfrac{3 \text{ mg}}{1 \text{ dose}} = \dfrac{x \text{ mg}}{4 \text{ dose}}$ B. $\dfrac{3 \text{ mg}}{4 \text{ dose}} = \dfrac{x \text{ mg}}{1 \text{ dose}}$

14. The label on the medication container states 0.50 g tablets. The patient is to receive 0.250 g each morning.How many tablets will the patient receive ?

15. The label on the medication container states 0.50 g tablets. The patient is to receive 2 g each morning.How many tablets will the patient receive ?

16. The patient tells the nurse that he takes 10 mL of Cephalexin four times daily. How many mg does the patient receive per dose ?

Contains cephalexin monohydrate, USP equivalent to 5 g cephalexin in a strawberry flavored mixture.

To the pharmacist: Directions for Mixing: Prepare suspension at time of dispensing. Add to the bottle a total of 67 mL of water. For ease in preparation, tap bottle to loosen powder, add the water in 2 portions, shaking well after each addition. The resulting suspension will contain cephalexin monohydrate, USP equivalent to 250 mg cephalexin in each 5 mL (teaspoonful).

Usual Pediatric Dose: 25 to 50 mg per kg a day in four divided dosed. For more severe infection, dose may be doubled. See accompanying literature.

Store dry powder at controlled room temperature, between 20° and 25°C (68° and 77°F) (see USP).

IMPORTANT
STORE RECONSTITUTED SUSPENSION IN REFRIGERATOR, MAY BE KEPT FOR 14 DAYS WITHOUT SIGNIFICANT LOSS OF POTENCY. DISCARD AFTER 14 DAYS.

Date of reconstitution _____

SHAKE WELL BEFORE USING.
KEEP TIGHTLY CLOSED.
Oversized bottle provides extra space for shaking.
KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.

NDC 67877-545-88

Cephalexin
for Oral
Suspension, USP

250 mg per 5 mL

when reconstituted according to directions.
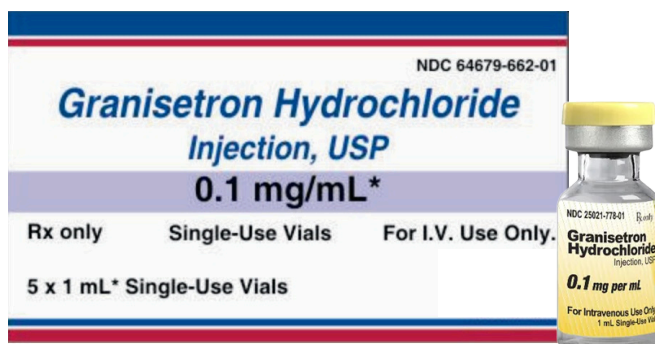
For Oral use only

Rx Only   100 mL (when mixed)

17. The patient is to receive 4 mg of IV Morphine q.4h as needed for severe pain. How many mL will the nurse give per dose ?

18. The doctor orders Granisetron 300 mcg IV 30 minutes prior to chemotherapy. The nurse has the following vials of Granisetron. How many mL will the nurse give to the patient ?
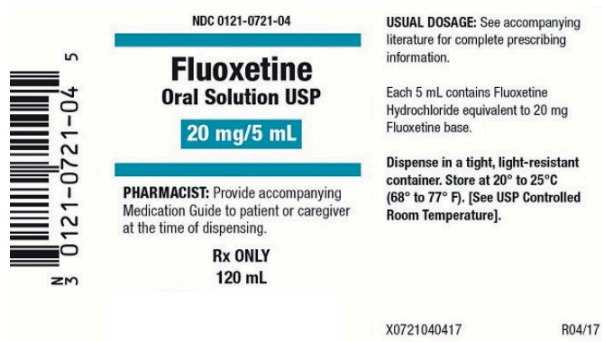
19. The physician's order is for 0.015 g PO each morning. How many tablets will the nurse instruct the patient to take ?

Store at controlled room temperature, 59° to 86°F (15° to 30°C).
PROTECT FROM LIGHT.
Dispense in tight (USP), light-resistant, child resistant containers.
DOSAGE AND USE See accompanying prescribing information.
*Each tablet contains amlodipine besylate equivalent to 5 mg amlodipine.

NDC 0069-1530-68

Norvasc ®
(amlodipine besylate) tablets

5 mg*

90 Tablets   Rx only

PAA068763

20. The nurse is to give 25 mg of Carvedilol PO twice a day. How many tablets of Carvedilol will the patient receive each day ?

Each tablet contains carvedilol, 12.5 mg.
Store below 30°C (86°F).
Protect from moisture.
Do not accept if seal under cap is missing or broken.
Dispense in a tight, light-resistant container.
Dosage: See accompanying prescribing information.
Rev.02, 07/21

NDC 72888-**036**-00

Carvedilol Tablets, USP

12.5 mg

1000 Tablets   **Rx Only**

21. The physician's order is for 0.1 g PO each morning. How many tablets will the nurse instruct the patient to take ?

NDC 16571-501-11

Losartan Potassium Tablets, USP

50 mg

PHARMACIST: Please dispense with attached patient information leaflet.

1000 Tablets

Rx only

Each tablet contains:
50 mg of losartan potassium USP
Store at 20° to 25°C (68° to 77°F);
excusions permitted to 15-30°C (59-86°F)
[see USP Controlled Room Temperature].
Keep container tightly closed.
Protect from light.

22. The nurse practitioner orders 80 mg of Fluoxetine Oral Solution PO daily for the patient. The pharmacy sends the following bottle of Fluoxetine. How many tsp will the patient receive ?

NDC 0121-0721-04

Fluoxetine
Oral Solution USP

20 mg/5 mL

PHARMACIST: Provide accompanying Medication Guide to patient or caregiver at the time of dispensing.

Rx ONLY
120 mL

0121-0721-04

USUAL DOSAGE: See accompanying literature for complete prescribing information.

Each 5 mL contains Fluoxetine Hydrochloride equivalent to 20 mg Fluoxetine base.

Dispense in a tight, light-resistant container. Store at 20° to 25°C (68° to 77° F). [See USP Controlled Room Temperature].

X0721040417   R04/17

Answers

6. Dimensional Analysis

Write the dosage strength of each medication as a conversion factor :

1

Store at controlled room
temperature, 59º to 86ºF
(15º to 30ºC).
PROTECT FROM LIGHT.
Dispense in tight
(USP), light-resistant,
child resistant
containers.
DOSAGE AND USE
See accompanying
prescribing information.
*Each tablet contains
amlodipine besylate
equivalent to 5 mg
amlodipine.

Pfizer   NDC 0069-1530-68

Norvasc®
(amlodipine besylate)
tablets

5 mg*

90 Tablets   Rx only

PAA068763

2

URSE/PATIENT: Fill dropper to the
vel of the prescribed dose. For ease
administration, add dose to
pproximately 30 mL (1 fl oz) or more
juice or other liquid. May also be
ded to applesauce, pudding or other
mi-solid foods. The drug-food
ixture should be used immediately
d not stored for future use.
eturn dropper to bottle after use.
ROTECT FROM LIGHT.
scard opened bottle after 90 days.
spense only in this bottle and only
th the calibrated dropper provided.
v. 09-2019-02

NDC 65162-**687**-84

**Lorazepam Oral
Concentrate, USP**

2 mg/mL

Each mL contains 2 mg lorazepam, USP

Usual Dosage: See Package Insert
for Complete Prescribing Information.

Store at cold temperature.
Refrigerate at 2° to 8°C (36° to 46°F).

Rx only   **30 mL**

3

NDC 0173-0741-10

R only

Ceftin® for
Oral Suspension
(cefuroxime axetil
for oral suspension)
For Oral Use Only

250 mg per 5 mL   50 mL (when reconstituted)

Contains 3.6 g of cefuroxime axetil equivalent to 3 g of cefuroxime.
Phenylketonurics: Contains Phenylalanine 25.2 mg per 5 mL (1 teaspoonful)
constituted suspension.
See package insert for Dosage and Administration.
Directions for Mixing Oral Suspension: Prepare the suspension at time
of dispensing. Shake the bottle to loosen the powder. Remove the cap.
Add 19 mL of water for reconstitution and replace the cap. Invert bottle and
vigorously rock it from side to side so that water rises through the powder.
Once the sound of the powder against the bottle disappears, turn the bottle
upright and vigorously shake it in a diagonal direction.
Before reconstitution, store dry powder between 2° and 30°C (36° and 86°F).
After reconstitution, store suspension between 2° and 8°C (36° and 46°F), in
a refrigerator. SHAKE WELL BEFORE EACH USE. Replace cap securely
after each opening. Discard after 10 days.

4

NDC 53489-141-01

Quinidine Gluconate Extended-Release Tablets USP

324 mg

Rx Only
100 Tablets

Each Extended-Release Tablet Contains:
Quinidine Gluconate, USP .... 324 mg

USUAL DOSAGE: Read package outsert for full prescribing information.

Store at 20° to 25°C (68° to 77°F).
[See USP Controlled Room Temperature]

DISPENSE IN TIGHT, LIGHT-RESISTANT CONTAINER.

Tablet debossed: MP 66

Rev 03, 06/17

53489 14101

5

NDC 0121-0721-04

Fluoxetine
Oral Solution USP

20 mg/5 mL

PHARMACIST: Provide accompanying Medication Guide to patient or caregiver at the time of dispensing.

Rx ONLY
120 mL

0121-0721-04 5

USUAL DOSAGE: See accompanying literature for complete prescribing information.

Each 5 mL contains Fluoxetine Hydrochloride equivalent to 20 mg Fluoxetine base.

Dispense in a tight, light-resistant container. Store at 20° to 25°C (68° to 77° F). [See USP Controlled Room Temperature].

X0721040417   R04/17

6

NDC 65862-698-20

Rx only

Cefuroxime Axetil Tablets, USP
125 mg*

20 Tablets

*Each film-coated tablet contains: Cefuroxime Axetil USP (amorphous) equivalent to 125 mg of cefuroxime.

See package insert for Dosage and Administration.

Store at 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature].

Replace cap securely after each opening.

Keep this and all drugs out of the reach of children.

7. The patient tells the nurse that he takes 4 tsp of Ceftin four times daily. How many mg does the patient receive per dose?
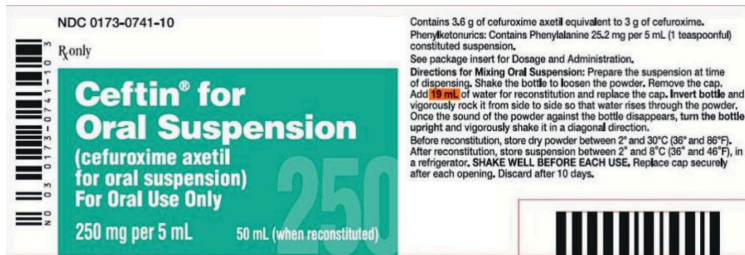
8.The doctor orders Granisetron 600 mcg IV 90 minutes prior to chemotherapy. The nurse has the following vials of Granisetron. How many mL will the nurse give to the patient ?

9. Calculate the dosage using dimensional analysis: The ordered dose is 0.75 g. The available dose is 250 mg.

10. Calculate the dosage using dimensional analysis: The ordered dose is 1.5 mg. The available dose is 0.25 mg per tablet.

NDC 0228-2027-10

Alprazolam Tablets, USP

0.25 mg

PHARMACIST: Dispense the accompanying Medication Guide to each patient.

Rx only
100 Tablets

Each Tablet Contains:
Alprazolam, USP ......0.25 mg
Usual Dosage: See accompanying literature for complete product information.
Dispense in tight, light-resistant containers as defined in the USP.
Keep container tightly closed.
Store at controlled room temperature 20° to 25°C (68° to 77°F) [see USP].

LOT/EXP. BELOW

32079412-02

11. Calculate the dosage using dimensional analysis: The ordered dose is 0.1 mg. The available dose is 50 mcg per tablet.

NDC 0480-8687-01

Levothyroxine Sodium Tablets, USP

50 mcg (0.05 mg)

Rx only
100 Tablets

Each scored tablet contains 50 mcg (0.05 mg) of levothyroxine sodium USP.
Dispense in tight, light-resistant containers as defined in the USP.
Keep this and all medications out of the reach of children.
Usual Dosage: See accompanying literature for complete prescribing information.
Store at 25°C (77°F) excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature]. Protect from light and moisture.

70070673   Iss. 10/2021

12. The medication is available in 50 mcg scored pills. The order is for 0.125 mg. How many pills will the patient receive ?

NDC 0480-8687-01

Levothyroxine Sodium Tablets, USP

50 mcg (0.05 mg)

Rx only
100 Tablets

Each scored tablet contains 50 mcg (0.05 mg) of levothyroxine sodium USP.
Dispense in tight, light-resistant containers as defined in the USP.
Keep this and all medications out of the reach of children.
Usual Dosage: See accompanying literature for complete prescribing information.
Store at 25°C (77°F) excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature]. Protect from light and moisture.

70070673   Iss. 10/2021

13. Calculate the dosage using dimensional analysis: The ordered dose is 0.75 mg. The available dose is 0.1 mg per tablet
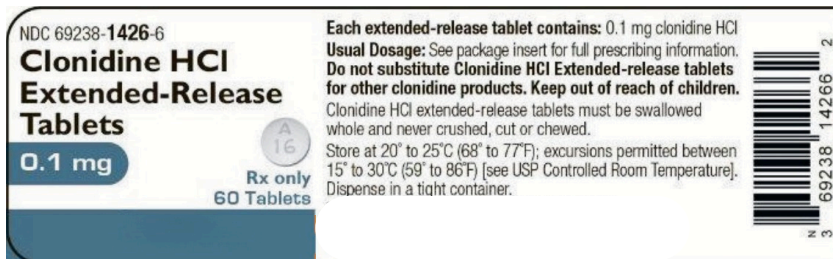
14. The patient is to receive 6 mg of IV Morphine q.4h as needed for severe pain. How many mL will the nurse give per dose?

15. The pharmacy sends the nurse the following medication. How many capsules will the nurse give to the patient if the physician's order is for calcitriol 0.015 mg p.o. daily ?
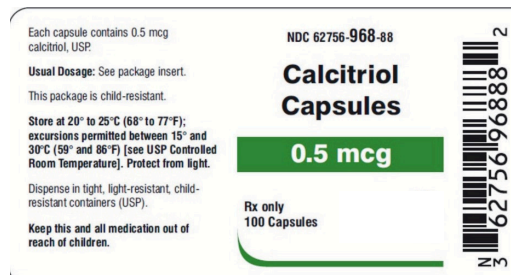
16. The nurse practitioner orders 0.06 g of Fluoxetine oral suspension PO daily for the patient. The pharmacy sends the following bottle of Fluoxetine. How many tsp will the patient receive?

NDC 0121-0721-04

Fluoxetine
Oral Solution USP

20 mg/5 mL

PHARMACIST: Provide accompanying Medication Guide to patient or caregiver at the time of dispensing.

Rx ONLY
120 mL

0121-0721-04

USUAL DOSAGE: See accompanying literature for complete prescribing information.

Each 5 mL contains Fluoxetine Hydrochloride equivalent to 20 mg Fluoxetine base.

Dispense in a tight, light-resistant container. Store at 20° to 25°C (68° to 77° F). [See USP Controlled Room Temperature].

X0721040417   R04/17

17. The ordered dose is 2.5 g. The available dose is 500 mg per tablet.

NDC 57237-059-20

Cefuroxime Axetil Tablets, USP

500 mg*

20 Tablets   Rx only

*Each film-coated tablet contains: Cefuroxime Axetil USP (amorphous) equivalent to 500 mg of cefuroxime.

See package insert for Dosage and Administration.

Store at 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature].

Replace cap securely after each opening. *

Keep this and all drugs out of the reach of children.

18. The following is the medication order: Give 0.75 g of Cephalexin oral suspension PO q12h. The following bottleof Cephalexin is available. How many oz will the nurse administer to the patient with each dose?

Contains cephalexin monohydrate, USP equivalent to 5 g cephalexin in a strawberry flavored mixture.

To the pharmacist: Directions for Mixing: Prepare suspension at time of dispensing. Add to the bottle a total of 67 mL of water. For ease in preparation, tap bottle to loosen powder, add the water in 2 portions, shaking well after each addition. The resulting suspension will contain cephalexin monohydrate, USP equivalent to 250 mg cephalexin in each 5 mL (teaspoonful).

Usual Pediatric Dose: 25 to 50 mg per kg a day in four divided dosed. For more severe infection, dose may be doubled. See accompanying literature.

Store dry powder at controlled room temperature, between 20° and 25°C (68° and 77°F) (see USP).

IMPORTANT
STORE RECONSTITUTED SUSPENSION IN REFRIGERATOR, MAY BE KEPT FOR 14 DAYS WITHOUT SIGNIFICANT LOSS OF POTENCY. DISCARD AFTER 14 DAYS.

Date of reconstitution _____

SHAKE WELL BEFORE USING.
KEEP TIGHTLY CLOSED.
Oversized bottle provides extra space for shaking.
KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.

NDC 67877-**545**-88

Cephalexin for Oral Suspension, USP

250 mg per 5 mL

when reconstituted according to directions.

For Oral use only

Rx Only   100 mL (when mixed)

19. Calculate the dosage using dimensional analysis: The ordered dose is 100mcg. The available dose is 0.05 mg per tablet.

NDC# 67544-0884-30
Levothyroxine NA (Synthroid)
0.05mg 30 Tablets

Store between 20-25 degrees C (68-77 degrees F).
See USP Controlled Room Temperature.
Dispense in a tight light-resistant container as defined by USP.
Keep this and all drugs out of the reach of children.

Batch:
Exp:
Lot:
RX Only

Levothyroxine NA (Synthroid) 0.05mg 30 Tablets
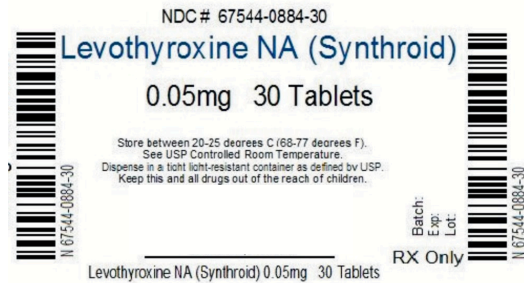
20. The nurse is to give 6.25 mg of Carvedilol PO twice a day. How many tablets of Carvedilol will the patient receive each day ?

NDC 65862-142-01

Rx only

Carvedilol Tablets, USP

3.125 mg

100 Tablets

Each film-coated tablet contains:
Carvedilol USP 3.125 mg.

Usual Dosage:
See accompanying prescribing information.

Dispense in a tight, light-resistant container.

Store at 20° to 25°C (68° to 77°F) [See USP Controlled Room Temperature]. Protect from moisture.

Important:
Use safety closures when dispensing this product unless otherwise directed by physician or requested by purchaser.

Answers

7. Formula Method

Identify the dosage strength of the medications below and write the H (Have) and the Q (Quantity) derived from the medication labels

1.Dosage strength =_____

    H =_____

    Q =_____

2.Dosage strength =_____

    H =_____

    Q =_____

3. Dosage strength =_____

   H =_____

   Q =_____

NDC 0173-0741-10

R only

Ceftin® for Oral Suspension
(cefuroxime axetil
for oral suspension)
For Oral Use Only

250 mg per 5 mL   50 mL (when reconstituted)

gsk

Contains 3.6 g of cefuroxime axetil equivalent to 3 g of cefuroxime.
Phenylketonurics: Contains Phenylalanine 25.2 mg per 5 mL (1 teaspoonful) constituted suspension.
See package insert for Dosage and Administration.
Directions for Mixing Oral Suspension: Prepare the suspension at time of dispensing. Shake the bottle to loosen the powder. Remove the cap. Add 19 mL of water for reconstitution and replace the cap. Invert bottle and vigorously rock it from side to side so that water rises through the powder. Once the sound of the powder against the bottle disappears, turn the bottle upright and vigorously shake it in a diagonal direction.
Before reconstitution, store dry powder between 2° and 30°C (36° and 86°F). After reconstitution, store suspension between 2° and 8°C (36° and 46°F), in a refrigerator. SHAKE WELL BEFORE EACH USE. Replace cap securely after each opening. Discard after 10 days.

4. Dosage strength =_____

   H =_____

   Q =_____

NDC 65862-142-01

Rx only

Carvedilol Tablets, USP

3.125 mg

100 Tablets

Each film-coated tablet contains:
Carvedilol USP 3.125 mg.

Usual Dosage:
See accompanying prescribing information.

Dispense in a tight, light-resistant container.

Store at 20° to 25°C (68° to 77°F) [See USP Controlled Room Temperature]. Protect from moisture.

Important:
Use safety closures when dispensing this product unless otherwise directed by physician or requested by purchaser.

5. Dosage strength =_____

   H =_____

   Q =_____

Store at controlled room temperature 15°-30°C (59°-86°F).

Protect from light.

Dispense in a well-closed container as defined in the USP.

DOSAGE AND USE
See accompanying prescribing information.

*Each tablet contains 5 mg of quinapril (equivalent to 5.416 mg quinapril hydrochloride).

NDC 0071-1205-23

Accupril®

(quinapril) tablets

5 mg*

90 Tablets　　**Rx only**

3 0071-1205-23 8

EXP:
LOT:
SN

6. Dosage strength =_____

   H =_____

   Q =_____

NDC 70882-130-21

Metronidazole

Tablets, USP

H5EB **250 mg***

Rx only
21 Tablets

For product inquiries, please call CTT at (844) 810-0004

250 mg* 250 mg* 250 mg* 250 mg* 250 mg*

*Each film-coated tablet contains metronidazole USP 250 mg.

DOSAGE AND USE: See accompanying prescribing information.

Store below 25°C (77°F).
Protect from light.

Dispense in tight, light-resistant, child-resistant containers (USP).

KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN

Revised 08/2017

3 70882-13021 9

11034

7. The MD orders 50 mg of Captopril PO daily. How many tablets will the nurse administer ?

Each tablet contains captopril, USP 25 mg.
Usual Dosage: See accompanying prescribing information.
Store at 20° to 25°C (68° to 77°F), excursions permitted to 15° to 30°C (59° to 86°F). [See USP Controlled Room Temperature.]
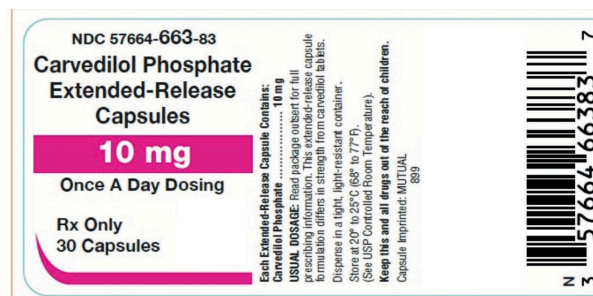Dispense in a tight, light-resistant container as defined in the USP using a child-resistant closure.
Keep container tightly closed. Protect from moisture.
KEEP OUT OF THE REACH OF CHILDREN.

NDC 0781-8061-01
Captopril Tablets, USP
25 mg
Rx Only
100 Tablets

8. The order is for 750 mg of Ceftin oral suspension PO q. AM. How many mL will the nurse administer?

NDC 0173-0740-00
R only

Ceftin® for Oral Suspension
(cefuroxime axetil for oral suspension)
For Oral Use Only

125 mg per 5 mL   100 mL (when reconstituted)

Contains 3.0 g of cefuroxime axetil equivalent to 2.5 g of cefuroxime.
Phenylketonurics: Contains Phenylalanine 11.8 mg per 5 mL (1 teaspoonful) constituted suspension.
See package insert for Dosage and Administration.
Directions for Mixing Oral Suspension: Prepare the suspension at time of dispensing. Shake the bottle to loosen the powder. Remove the cap. Add 37 mL of water for reconstitution and replace the cap. **Invert bottle** and vigorously rock it from side to side so that water rises through the powder. Once the sound of the powder against the bottle disappears, turn the bottle upright and vigorously shake it in a diagonal direction.
Before reconstitution, store dry powder between 2° and 30°C (36° and 86°F). After reconstitution, store suspension between 2° and 8°C (36° and 46°F), in a refrigerator. **SHAKE WELL BEFORE EACH USE.** Replace cap securely after each opening. Discard after 10 days.

10000000136641   Rev. 8/15

9. The MD orders Doxycycline oral suspension 200 mg PO daily. How many mL will the nurse administer ?

NDC 68180-657-01
Doxycycline for Oral Suspension USP
25 mg/5 mL
RASPBERRY FLAVORED
When reconstituted as directed, each teaspoonful (5 mL) contains doxycycline monohydrate equivalent to 25 mg of doxycycline.
FOR ORAL USE ONLY
60 mL when reconstituted

Store dry powder at 20 to 25°C (68 to 77°F) [See USP Controlled Room Temperature]. Protect from light.
MIXING DIRECTIONS
Tap bottle lightly to loosen powder. Add 50 mL of water to the bottle to make a total volume of 60 mL. Shake well.
This prescription, when in suspension, will maintain its potency for two weeks when kept at room temperature.

SHAKE WELL BEFORE EACH USE
DISCARD UNUSED PORTION AFTER TWO WEEKS
DOSAGE AND USE
See accompanying prescribing information.
Each bottle contains doxycycline monohydrate equivalent to 300 mg of doxycycline.

54 x 16 mm

10. The following is the medication order: Give 0.75 g of Cefuroxime oral suspension PO q.12h. The following bottle of Cefuroxime is available. How many oz will the nurse administer to the patient ?

CEFUROXIME AXETIL FOR ORAL SUSPENSION, USP
(for Oral Use Only)
250 mg/5 mL
50 mL (When Reconstituted)
Rx only

11. The pharmacy sends the nurse the following bottle of Nizatidine Oral Solution. The order is to administer 0.15g PO daily. How many tsp will the patient receive ?

NDC 60846-301-15
NIZATIDINE ORAL SOLUTION
15 mg/mL (75 mg/5 mL)
Each mL contains 15 mg of nizatidine.
Rx only   480 mL

NDC 60846-301-15
NIZATIDINE ORAL SOLUTION
15 mg/mL (75 mg/5 mL)
Each mL contains 15 mg of nizatidine.
See package outsert for Dosage and Administration. Store at 20° to 25°C (68° to 77°F); excursions permitted between 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature].
KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN
Dispense in a tight, light-resistant container as defined in the USP.
Rx only
480 mL

12. The patient is to receive 5000 mcg of IV Morphine q.4h as needed for severe pain. How many mL will the nurse give per dose ?

13. The physician's order is for 0.01 g Norvasc PO each morning. How many tablets will the nurse instruct the patient to take?

14. The patient tells the nurse that he takes 12 mL of Cefuroxime four times daily. How many mg does the patient receive per dose?

NDC 63304-964-03

CEFUROXIME AXETIL FOR ORAL SUSPENSION, USP
(for Oral Use Only)

250 mg/5 mL

50 mL (When Reconstituted)

Rx only

See package insert for Dosage and Administration.
Directions for Mixing Oral Suspension: Prepare the suspension at time of dispensing. Shake the bottle to loosen the powder. Remove the cap. Add 22 mL of water for reconstitution and replace the cap. Vigorously shake in a diagonal direction to form suspension.
Phenylketonurics: Contains phenylalanine 4.5 mg per 5 mL.
Before reconstitution, store dry powder between 20 - 25° C (68 - 77° F). (See USP Controlled Room Temperature).
After reconstitution, store suspension between 2 - 8° C (36 - 46° F), in a refrigerator.
SHAKE WELL BEFORE EACH USE.
Replace cap securely after each opening. Discard after 10 days.

0507

15. The ordered dose is 0.2 g Losartan. The available dose is 100 mg per tablet. How many tablets should be administered?

Each coated tablet contains:
Losartan Potassium USP, 100 mg

NDC 59746-335-30

Usual Dosage: See accompanying package outsert.

Losartan Potassium Tablets, USP

Keep this and all medications out of the reach of children.

Store at 25°C (77°F); excursions permitted to 15-30°C (59-86°F) [see USP Controlled Room Temperature].

100 mg

PHARMACIST: PLEASE DISPENSE WITH ACCOMPANYING PATIENT INFORMATION LEAFLET.

Keep container tightly closed.
Protect from Light.

Rev.# 02/17

℞ Only

16. The ordered dose is 1.5 mg Alprazolam. The available dose is 0.5 mg per tablet. How many tablets should be administered?

NDC 0228-3083-06   C IV

Alprazolam Extended-Release Tablets, USP

0.5 mg

PHARMACIST: Dispense the accompanying Medication Guide to each patient.

Rx only
60 Tablets

GTIN 00302283083061

Print Medication Guides at:
www.tevausa.com/medguides

Each Extended-Release Tablet Contains:
Alprazolam, USP ....0.5 mg
Usual Dosage: See accompanying product information.
Dispense in a tight, light-resistant container as defined in the USP.
Store at 25°C (77°F); excursions permitted to 15° to 30°C (59° to 86°F) [See USP Controlled Room Temperature]. Keep container tightly closed.

Rev. A 09/2021   52-0013

LOT/EXP. BELOW

0228-3083-06

17. The ordered dose is 1.5 g. The available dose is 500 mg per tablet. How many tablets should be administered?

NDC 57237-059-20

Cefuroxime Axetil Tablets, USP

500 mg*

20 Tablets   Rx only

*Each film-coated tablet contains:
Cefuroxime Axetil USP (amorphous) equivalent to 500 mg of cefuroxime.

See package insert for Dosage and Administration.

Store at 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature].

Replace cap securely after each opening.

Keep this and all drugs out of the reach of children.

*

18. The ordered dose is 75 mg. The available dose is 25 mg per tablet. How many tablets should be administered?

NDC 65841-619-01

Carvedilol Tablets, USP

25 mg

Each tablet contains:
Carvedilol, USP .... 25 mg

Usual Dosage: See package insert for complete prescribing information.

Store at 20° to 25°C (68° to 77°F)
[See USP Controlled Room Temperature].

Important : Use safety closures when dispensing this product unless otherwise directed by physician or requested by purchaser.

Dispense in a tight, light-resistant container. Protect from moisture.

KEEP THIS AND ALL THE DRUGS OUT OF THE REACH OF CHILDREN

100 TABLETS
Rx only

19. The ordered dose is 50.000 mcg. The available dose is 10 mg per tablet. How many tablets should be administered?

NDC 57664-663-83

Carvedilol Phosphate Extended-Release Capsules

10 mg

Once A Day Dosing

Rx Only
30 Capsules

20. The ordered dose is 0.02 g. The available dose is 10 mg per tablet. How many tablets should be administered?

Store at controlled room temperature 15°-30°C (59°-86°F).
Protect from light.
Dispense in a well-closed container as defined in the USP.

DOSAGE AND USE
See accompanying prescribing information.

*Each tablet contains quinapril HCI equivalent to 10 mg quinapril.

NDC 0071-0530-23

Accupril®
(Quinapril HCI Tablets)

10 mg*

90 Tablets   Rx only
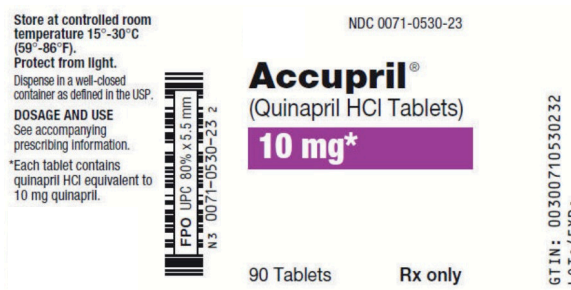
Answers

8. Calculating Oral Medication Doses

1.How many tablet(s) of Alprazolam will the nurse administer ?

Electronic Medical Record   **Provider Orders** ❌

| Name | C. Patient | Age | 49 | Gender | M | DOB | 04-18-xx |

MR #   49456   **Allergies**   NKDA   Room   148

Provider   M. Physician, MD   **Date** 04-09-xx

Order

Alprazolam 125 mcg PO q.AM

NDC 70954-**508**-30   **1000 Tablets**

Alprazolam Tablets, USP Ⓒ IV

0.25 mg

PHARMACIST: Dispense the accompanying Medication Guide to each patient.
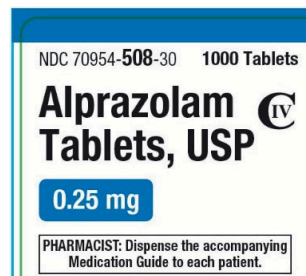
2. Calculate the amount of Doxycycline oral suspension to be administered per dose to the patient

Electronic Medical Record   **Provider Orders** ❌

Name   C. Patient   Age 49   Gender M   DOB   04-18-xx

MR #   49456   **Allergies**   NKDA   Room   148

Provider   M. Physician, MD   **Date** 04-09-xx

Order

Doxycyxline oral suspension 0.05 gram q.12h

NDC 68180-657-01

Doxycycline for Oral Suspension USP

25 mg/5 mL

RASPBERRY FLAVORED

When reconstituted as directed, each teaspoonful (5 mL) contains doxycycline monohydrate equivalent to 25 mg of doxycycline.

FOR ORAL USE ONLY

60 mL when reconstituted
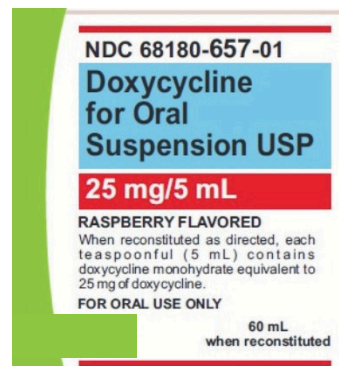
* — Types of multiple-choice questions

3. How many mL of Doxycycline oral suspension will the nurse administer ?

Electronic Medical Record — **Provider Orders** ☒

Name C. Patient	**Age** 49	**Gender** M	**DOB** 04-18-xx			

MR # 49456 **Allergies** NKDA **Room** 148

Provider M. Physician, MD **Date** 04-09-xx ← →

▼ **Order**

Doxycyxline oral suspension 100 mg q.12h

NDC 68180-657-01

Doxycycline for Oral Suspension USP

25 mg/5 mL

RASPBERRY FLAVORED
When reconstituted as directed, each teaspoonful (5 mL) contains doxycycline monohydrate equivalent to 25 mg of doxycycline.

FOR ORAL USE ONLY

60 mL when reconstituted

4. How many mL of Fluconazole oral suspension will the nurse administer ?

Electronic Medical Record — **Provider Orders** ☒

Name C. Patient **Age** 49 **Gender** M **DOB** 04-18-xx

MR # 49456 **Allergies** NKDA **Room** 148

Provider M. Physician, MD **Date** 04-09-xx ← →

▼ **Order**

Fluconazole oral suspension 100 mg q.12h

NDC 65862-300-35

Rx only

Fluconazole for Oral Suspension USP

40 mg/mL

when reconstituted

35 mL when reconstituted

5. How many mL of Erythromycin Ethylsuccinate will the nurse administer ?

Electronic Medical Record — **Provider Orders** ☒

Name C. Patient **Age** 49 **Gender** M **DOB** 04-18-xx

MR # 49456 **Allergies** NKDA **Room** 148

Provider M. Physician, MD **Date** 04-09-xx ← →

▼ **Order**

Erythromycin ethylsuccinate oral suspension 0.6 gram q.AM

NDC 62559-631-01

Erythromycin Ethylsuccinate for Oral Suspension USP

Erythromycin activity 400 mg per 5 mL when reconstituted

Rx only
100 mL (when mixed)

Store granules, prior to mixing, below 86°F (30°C).
DIRECTIONS FOR PREPARATION: Slowly add 50 mL of water and shake vigorously to make 100 mL of suspension.
When prepared as directed, each 5 mL teaspoonful contains erythromycin ethylsuccinate equivalent to 400 mg of erythromycin in a cherry-flavored suspension.
Bottle contains erythromycin ethylsuccinate equivalent to 8 g erythromycin. Child-resistant closure not required; exemption approved by U.S. Consumer Product Safety Commission.
May be taken without regard to meals. Shake well before using. Oversize bottle provides shake space. Keep tightly closed.
Usual Dose: Children: 30 to 50 mg/kg/day in divided doses. See package insert for adult dose and full prescribing information.

10146 Rev 05/18

After mixing, store below 77°F (25°C) and use within 35 days. Refrigeration not required.

6.* After reconstituting the FLuconazole oral suspension, the nurse will include which of the following on the drug label? (Select all that apply.

   a) Total amount of reconstituted drug
   b) Dosage strength of the drug
   c) Time of reconstitution
   d) Nurse's initials
   e) Date of reconstitution

NDC 65862-300-35

Rx only

Fluconazole for Oral Suspension USP

40 mg/mL
when reconstituted

35 mL when reconstituted

7.* Cefuroxime for Oral Suspension 250 mg is ordered. Pharmacy sends the following drug. Which of the following applies to the administration of this ordered dose ? (Select all that apply.)

   a) One tsp will be administered
   b) The bottle needs to be shaken well
   c) 5 mL will be administered
   d) 2 mL will be administered

NDC 63304-964-03

CEFUROXIME AXETIL FOR ORAL SUSPENSION, USP
(for Oral Use Only)

250 mg/5 mL

50 mL (When Reconstituted)

Rx only
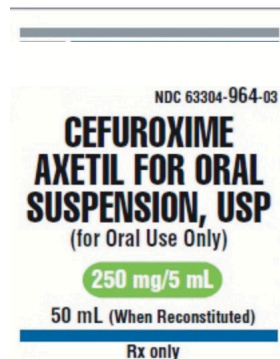
8.* Cyproheptadine syrup 1 mg is ordered. Pharmacy sends the following drug with a dropper calibrated at the 0.5 mL and 1 mL markings. Which of the following apply to the administration of this ordered dose ? (Select all that apply.)

a) 1 mL will be administered
b) The medicine cup can also be used to measure this dose
c) The drug needs to be reconstituted
d) A conversion is not necessary
e) 2.5 mL will be administered

NDC 0121-0788-16

Cyproheptadine Hydrochloride Syrup
(Cyproheptadine Hydrochloride Oral Solution, USP)

2 mg/5 mL

Each 5 mL (one teaspoonful) contains:
Cyproheptadine hydrochloride..... 2 mg
Alcohol 5%

Rx ONLY

16 fl oz (473 mL)

9. Use the provider's orders and Calcitriol label to determine the ordered dose. How many Calcitriol capsule(s) willthe nurse administer to the patient ?

Electronic Medical Record   Provider Orders ☒

Name C. Patient   Age 49   Gender M DOB 04-18-xx

MR #   49456   Allergies   NKDA   Room 148

Provider M. Physician, MD   Date 04-09-xx ⬅ ➡

▼ Order

Calcitriol capsule 1.5 mcg PO daily

NDC 63304-**239**-01

CALCITRIOL CAPSULES

0.25 mcg

Rx Only
100 Capsules
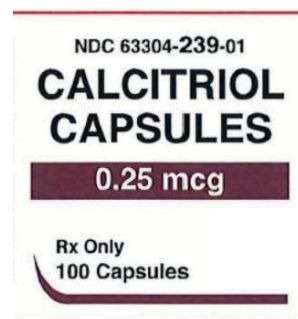
10. Amantadine Hydrochloride oral solution 150 mg PO is ordered. How many tsp will the nurse instruct the patient to take ?

AMANTADINE HYDROCHLORIDE ORAL SOLUTION USP, 50 mg/5 mL

Each teaspoonful (5 mL) contains:
Amantadine Hydrochloride, USP ... 50 mg

USUAL DOSAGE: See package insert for full prescribing information.

Dispense in original container or in a tight container as defined in the USP, with a child-resistant closure (as required).

Keep tightly closed. Store at 20° to 25°C (68° to 77°F). [See USP Controlled Room Temperature].

Rx only

11. The available dose is 50 mg per tablet. The ordered dose is 0.2 g. How many tablets should be administered?

a) 1 tablet
b) 2 tablets
c) 3 tablets
d) 4 tablets

NDC 69399-182-81
Celecoxib Capsules
50 mg
PHARMACIST:
Dispense the accompanying Medication Guide to each patient.
Rx only   100 Capsules

12. The available dose is 10 mg per tablet. The ordered dose is 0.02 g. How many tablets should be administered?

a) 1 tablet
b) 2 tablets
c) 3 tablets
d) 4 tablets

NDC 60429-**185**-90
Enalapril Maleate
Tablets, USP
10 mg
90 tablets
Rx Only

13. A medication is available in a vial containing 750 mg. The recommended dose is 300 mg. How many vials should be administered for a single dose?

        a) 1 vial
        b) 2 vials
        c) 2.5 vials
        d) 3 vials

14. The prescribed dose of a medication is 0.02 mg/kg. A patient weighs 60 kg. Calculate the ordered dose.

        a) 1 mg
        b) 1.2 mg
        c) 1.5 mg
        d) 2 mg

15. A medication has a recommended dose of 0.5 mg. The available strength of the medication is 250 mcg. How many tablets should be administered for a single dose?

        a) 1 tablet
        b) 2 tablets
        c) 3 tablets
        d) 4 tablets

16. Calculate the ordered dose for a medication if the prescribed dose is 0.1 mg/kg and the patient's weight is 50 kg.

   a) 5 mg
   b) 10 mg
   c 15 mg
   d) 20 mg

17. A medication is available in a concentration of 50 mg/mL. The prescribed dose is 25 mg. How many milliliters should be administered for a single dose?

   a) 0.25 mL
   b) 0.5 mL
   c) 1 mL
   d) 2 mL

HYDROXYZINE HCl
INJECTION, USP
50 mg/mL

NDC 0517-5601-25
25 x 1 mL
SINGLE DOSE VIALS

FOR INTRAMUSCULAR USE ONLY   Rx Only
Each mL contains: Hydroxyzine HCl 50 mg, Benzyl Alcohol 0.9%,
Water for Injection q.s. pH adjusted with Sodium Hydroxide
and/or Hydrochloric Acid.
WARNING: PROTECT FROM LIGHT. DISCARD UNUSED
PORTION. Store at 20°-25°C (68°-77°F); excursions permitted
to 15°-30°C (59°-86°F) (See USP Controlled Room Temperature).
Directions for Use: See Package Insert.

Lot / Exp.

18. The prescribed dose of a medication is 2.5 mg/kg/day. A patient weighs 80 kg. Calculate the ordered daily dose.

   a) 100 mg
   b) 200 mg
   c) 250 mg
   d) 400 mg

19. A medication is available in a vial containing 1.5 g. The recommended dose is 3000 mg. How many vials should be administered for a single dose?

     a) 1 vial
     b) 2 vials
     c) 3 vials
     d) 4 vials

20. The prescribed dose of a medication is 0.05 mg/kg. A patient weighs 70 kg. Calculate the ordered dose.

     a) 1 mg
     b) 3.5 mg
     c) 7 mg
     d) 14 mg
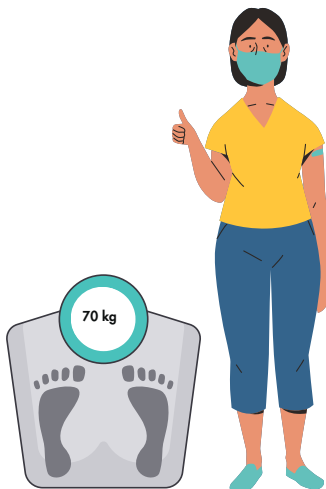
Answers

9. Syringes and Needles

1. Which syringe and needle combination would you use to administer a subcutaneous injection to an adult patient?

   A. 1 mL syringe with a 25-gauge, 5/8-inch needle
   B. 3 mL syringe with a 22-gauge, 1-inch needle
   C. 5 mL syringe with a 27-gauge, 1/2-inch needle
   D. 10 mL syringe with a 18-gauge, 1.5-inch needle

2. Which syringe and needle combination would you use to administer an intramuscular injection to an infant?

   A. 1 mL syringe with a 25-gauge, 5/8-inch needle
   B. 3 mL syringe with a 22-gauge, 1-inch needle
   C. 5 mL syringe with a 27-gauge, 1/2-inch needle
   D. 10 mL syringe with a 18-gauge, 1.5-inch needle

3. The nurse is to draw up a medication for subcutaneous injection. Which of the following is the most appropriate needle size for the nurse to choose?

   A. 27G 1"
   B. 25G 5/8"
   C. 22G 1 1/2 "
   D. 19G 1"

4. The nurse in the allergy clinic prepares an intradermal injection. The dose is contained in 0.3 mL. Which syringe will the nurse choose?

    A. 3 mL 27G 1"
    B. 3 mL 25G 5/8"
    C. 1 mL 21G 1"
    D. 1 mL 26G 1 1/2 "

5. Which syringe and needle combination would you use to administer an intravenous medication to an adult patient?

    A. 1 mL syringe with a 25-gauge, 5/8-inch needle
    B. 3 mL syringe with a 22-gauge, 1-inch needle
    C. 5 mL syringe with a 27-gauge, 1/2-inch needle
    D. 10 mL syringe with a 18-gauge, 1.5-inch needle

6. Which syringe and needle combination would you use to administer an intradermal injection for a tuberculin skin test?

    A. 1 mL syringe with a 25-gauge, 5/8-inch needle
    B. 3 mL syringe with a 22-gauge, 1-inch needle
    C. 5 mL syringe with a 27-gauge, 1/2-inch needle
    D. 10 mL syringe with a 18-gauge, 1.5-inch needle

7. Which syringe and needle combination would you use to administer an intravenous medication to a pediatric patient?

    A. 1 mL syringe with a 25-gauge, 5/8-inch needle
    B. 3 mL syringe with a 22-gauge, 1-inch needle
    C. 5 mL syringe with a 27-gauge, 1/2-inch needle
    D. 10 mL syringe with a 18-gauge, 1.5-inch needle

8. Which syringe and needle combination would you use to administer a subcutaneous injection to an elderly patient with thin skin?

    A. 1 mL syringe with a 25-gauge, 5/8-inch needle
    B. 3 mL syringe with a 22-gauge, 1-inch needle
    C. 5 mL syringe with a 27-gauge, 1/2-inch needle
    D. 10 mL syringe with a 18-gauge, 1.5-inch needle

9. The nurse is to draw up 2.4 mL of medication for IM injection. The patient weighs 235 pounds. Which of the following is the best syringe and needle for the nurse to choose?

    A. 3 mL 27G 1 /2 "
    B. 3 mL 25G 5/8"
    C. 3 mL 23G 2"
    D. 3 mL 18G 1/2 "

10. Which syringe and needle combination would you use to administer an intramuscular injection to an adult patient with a larger muscle mass?

    A. 1 mL syringe with a 25-gauge, 5/8-inch needle
    B. 3 mL syringe with a 22-gauge, 1-inch needle
    C. 5 mL syringe with a 27-gauge, 1/2-inch needle
    D. 10 mL syringe with a 18-gauge, 1.5-inch needle

11. Which syringe and needle combination would you use to administer an intravenous medication to a critically ill patient?

    A. 1 mL syringe with a 25-gauge, 5/8-inch needle
    B. 3 mL syringe with a 22-gauge, 1-inch needle
    C. 5 mL syringe with a 27-gauge, 1/2-inch needle
    D. 10 mL syringe with a 18-gauge, 1.5-inch needle

12. The nurse is preparing 1 mL an intravenous medication for direct IV injection into the IV tubing. The medication is contained in a vial. The nurse is most correct to use which of the following to withdraw the medication ?

    A.1 mL 27G 3/8"
    B.1 mL 25G 5/8"
    C.3 mL 23G 1/2 "
    D.3 mL 19G 1"

13. Which syringe and needle combination would you use to administer an intradermal injection for an allergy test?

    A. 1 mL syringe with a 25-gauge, 5/8-inch needle
    B. 3 mL syringe with a 22-gauge, 1-inch needle
    C. 5 mL syringe with a 27-gauge, 1/2-inch needle
    D. 10 mL syringe with a 18-gauge, 1.5-inch needle

14. Which syringe and needle combination would you use to administer a subcutaneous injection to an overweight patient?
   A. 1 mL syringe with a 25-gauge, 5/8-inch needle
   B. 3 mL syringe with a 22-gauge, 1-inch needle
   C. 5 mL syringe with a 27-gauge, 1/2-inch needle
   D. 10 mL syringe with a 18-gauge, 1.5-inch needle

15. Examine the provided images and identify the correct answers.
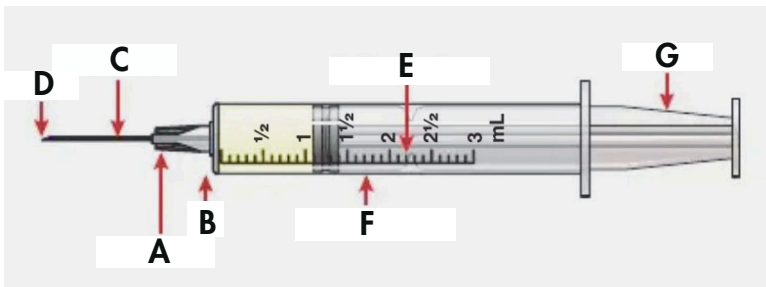
Answers

10. Calculating Parenteral Medication Dosages

1. The order is for Methylprednisolone 80 mg IM now. The following medication is available from the pharmacy. How many mL will the nurse give?

2. The physician orders Lorazepam 3 mg IV now. The following medication is available from the pharmacy. How many mL will the nurse give ?
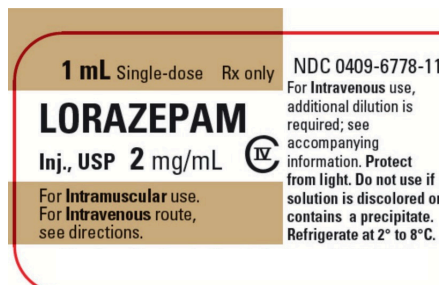
3. The order is for Amiodarone 200 mg IV now. The following medication is available from the pharmacy. How many mL will the nurse give?

NDC 0143-9875-01

AMIODARONE
HYDROCHLORIDE INJECTION

150 mg/3 mL
(50 mg/mL)

FOR IV USE ONLY
Rx ONLY

3 mL Single Dose Vial
MUST BE DILUTED BEFORE USE.
USUAL DOSAGE: See package insert.
Store at 20° to 25°C (68° to 77°F) [See USP Controlled Room Temperature].
Retain in carton until time of use.

4. The order is for Propranolol 150 mcg IV now. The following medication is available from the pharmacy. How many mL will the nurse give?

NDC 0143-9872-01   Rx only

Propranolol
Hydrochloride
Injection, USP

1 mg/mL

For IV use ONLY
1 mL Single Dose Vial

Usual Dosage: See package insert.
Store at 20° to 25°C (68° to 77°F) [See USP Controlled Room Temperature].

(01)00301439872016
PLB407-WES/4
Lot:
Exp:

5. The order is for Corvert 150 mcg IV now. The following medication is available from the pharmacy. How many mL will the nurse give?

Store at controlled room temperature 20° to 25°C (68° to 77°F) [see USP].
DOSAGE AND USE:
See accompanying prescribing information.
Each mL contains ibutilide fumarate, 0.1 mg. Also contains sodium chloride, 8.90 mg; sodium acetate trihydrate, 0.189 mg; water for injection. When necessary, pH was adjusted with sodium hydroxide and/or hydrochloric acid.

NDC 0009-3794-01
10 mL Single-Dose Vial
Corvert®
(ibutilide fumarate injection)
1 mg/10 mL
(0.1 mg/mL)
For IV use only
Rx only
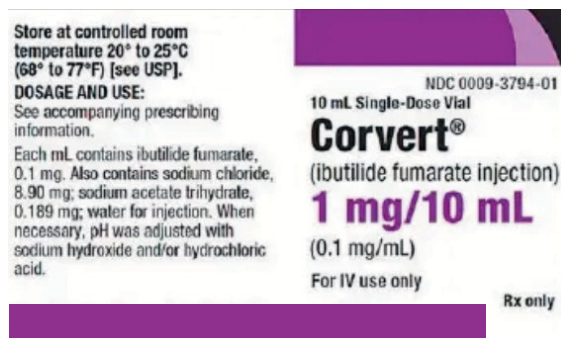
6. Which of the following is the correct calculation for determining the dosage of a parenteral medication?

    A) Weight of patient (kg) × dosage ordered (mg/kg) = dose to administer (mg)

    B) Volume of medication (mL) ÷ time of infusion (hours) = rate of infusion (mL/h)

    C) Ordered dose (mg) ÷ available concentration (mg/mL) = volume to administer (mL)

    D) Patient's age (years) × dosage ordered (mg/kg/day) = dose to administer (mg/day)

7. A patient is prescribed 500 mg of a medication with an available concentration of 250 mg/mL. How many milliliters of the medication should be administered?

    A) 1 mL
    B) 2 mL
    C) 3 mL
    D) 4 mL

8. A medication is ordered to be administered at a rate of 40 mL/h. The available concentration of the medication is 500 mg/100 mL. What is the dosage of the medication in milligrams per hour?

    A) 20 mg/h
    B) 40 mg/h
    C) 200 mg/h
    D) 100 mg/h

9. A patient weighs 70 kg and is prescribed a medication at a dosage of 0.5 mg/kg. How many milligrams of the medication should be administered?

    A) 25 mg
    B) 35 mg
    C) 45 mg
    D) 55 mg

10. Hydralazine is available in a concentration of 20 mg/mL. The prescribed dose for a patient is 60 mg. How many milliliters of the medication should be administered?

    A) 2 mL
    B) 3 mL
    C) 4 mL
    D) 5 mL

NDC 63323-614-16 PRX601401
hydrALAZINE Hydrochloride
Injection, USP
20 mg per mL
For intramuscular or intravenous use.
Rx only
25 x 1 mL
Single Dose Vials

11. Ephedrine Sulfate Injection is ordered to be administered at a rate of 25 mg/h. The available concentration of the medication is 50 mg/mL. What is the infusion rate in milliliters per hour?

    A) 0.5 mL/h
    B) 1 mL/h
    C) 1.5 mL/h
    D) 2 mL/h

NDC 17478-415-10
Ephedrine Sulfate Injection, USP
50 mg/mL
For Intravenous Use
Must Dilute Before Use

1 mL Single Dose Ampules - Discard Unused Portion.
10 Ampules (1 mL each)

Rx only
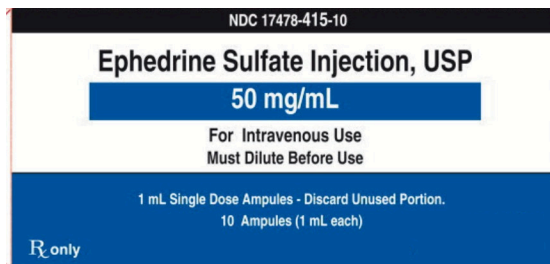
12. A patient weighs 60 kg and is prescribed a medication at a dosage of 1.5 mg/kg. How many milligrams of the medication should be administered?

   A) 45 mg
   B) 60 mg
   C) 75 mg
   D) 90 mg

13. Morphine Sulfate is available in a concentration of 10 mg/mL. The prescribed dose for a patient is 30 mg. How many milliliters of the medication should be administered?

   A) 2 mL
   B) 3 mL
   C) 4 mL
   D) 5 mL

475101
Morphine Sulfate
Injection, USP

10 mg per mL

For IV or IM use only.
Preservative free.
Protect from light (keep in outer carton). Keep from freezing.
1 mL Single Dose Vial   Rx only

14. Meperidine is ordered to be administered at a rate of 10 mg/h. The available concentration of the medication is 25 mg/mL. What is the infusion rate in milliliters per hour?

   A) 0.25 mL/h
   B) 0.4 mL/h
   C) 0.6 mL/h
   D) 0.8 mL/h

NDC 0641-**6052**-25   Rx only
Meperidine
HCl Injection, USP
25 mg/mL

For Intramuscular, Subcutaneous or slow Intravenous use

15. A patient weighs 50 kg and is prescribed a medication at a dosage of 0.8 mg/kg. How many milligrams of the medication should be administered?

  A) 30 mg
  B) 40 mg
  C) 50 mg
  D) 60 mg

16. A patient weighs 80 kg and is prescribed a medication at a dosage of 0.6 mg/kg. How many milligrams of the medication should be administered?

  A) 48 mg
  B) 54 mg
  C) 60 mg
  D) 72 mg

17. Ketorolac Tromethamine is available in a concentration of 15 mg/mL. The prescribed dose for a patient is 45 mg. How many milliliters of the medication should be administered?

  A) 2 mL
  B) 3 mL
  C) 4 mL
  D) 5 mL

NDC 72266-234-01
Ketorolac Tromethamine
Injection, USP

15 mg/mL

FOR INTRAMUSCULAR OR INTRAVENOUS USE ONLY
1 mL Single-Dose Vial

Rx Only

18. A medication is ordered to be administered at a rate of 15 mg/h. The available concentration of the medication is 30 mg/mL. What is the infusion rate in milliliters per hour?

A) 0.5 mL/h
B) 1 mL/h
C) 1.5 mL/h
D) 2 mL/h

NDC 72266-118-01
Ketorolac
Tromethamine
Injection, USP

30 mg/mL

FOR INTRAMUSCULAR OR
INTRAVENOUS USE ONLY
1 mL Single-Dose Vial
℞ Only

Protect from light.

19. A patient weighs 65 kg and is prescribed a medication at a dosage of 0.7 mg/kg. How many milligrams of the medication should be administered?

A) 45.5 mg
B) 52 mg
C) 56.5 mg
D) 61.5 mg

20. Meperidine is available in a concentration of 25 mg/mL. The prescribed dose for a patient is 75 mg. How many milliliters of the medication should be administered?

A) 3 mL
B) 4 mL
C) 5 mL
D) 6 mL

Meperidine
HCl Injection, USP

25 mg/mL

For Intramuscular, Subcutaneous
or slow Intravenous use

25 x 1 mL Single Dose Vials

21. A medication is ordered to be administered at a rate of 20 mg/h. The available concentration of the medication is 40 mg/mL. What is the infusion rate in milliliters per hour?

  A) 0.5 mL/h
  B) 1 mL/h
  C) 1.5 mL/h
  D) 2 mL/h

22. A patient weighs 70 kg and is prescribed a medication at a dosage of 0.5 mg/kg. How many milligrams of the medication should be administered?

  A) 35 mg
  B) 42 mg
  C) 49 mg
  D) 56 mg

23. A patient weighs 60 kg and is prescribed a medication at a dosage of 0.4 mg/kg. How many milligrams of the medication should be administered?

  A) 24 mg
  B) 30 mg
  C) 36 mg
  D) 42 mg

24. A medication is available in a concentration of 12 mg/mL. The prescribed dose for a patient is 48 mg. How many milliliters of the medication should be administered?

    A) 3 mL
    B) 4 mL
    C) 5 mL
    D) 6 mL

25. A medication is ordered to be administered at a rate of 12 mg/h. The available concentration of the medication is 24 mg/mL. What is the infusion rate in milliliters per hour?

    A) 0.5 mL/h
    B) 1 mL/h
    C) 1.5 mL/h
    D) 2 mL/h

26. A medication is available in a concentration of 18 mg/mL. The prescribed dose for a patient is 54 mg. How many milliliters of the medication should be administered?

    A) 2.5 mL
    B) 3 mL
    C) 3.5 mL
    D) 4 mL

27. A medication is ordered to be administered at a rate of 30 mg/h. The available concentration of the medication is 60 mg/mL. What is the infusion rate in milliliters per hour?

  A) 0.5 mL/h
  B) 1 mL/h
  C) 1.5 mL/h
  D) 2 mL/h

28. A patient weighs 55 kg and is prescribed a medication at a dosage of 0.8 mg/kg. How many milligrams of the medication should be administered?

  A) 40 mg
  B) 44 mg
  C) 48 mg
  D) 52 mg

29. A medication is available in a concentration of 14 mg/mL. The prescribed dose for a patient is 70 mg. How many milliliters of the medication should be administered?

  A) 4 mL
  B) 4.5 mL
  C) 5 mL
  D) 5.5 mL

Parenteral Route of Drug Administration

Intramuscular
90°

Subcutaneous
45°

Intravenous
25°

Intradermal
10–15°

Epidermis

Dermis

Subcutaneous tissue
Muscle
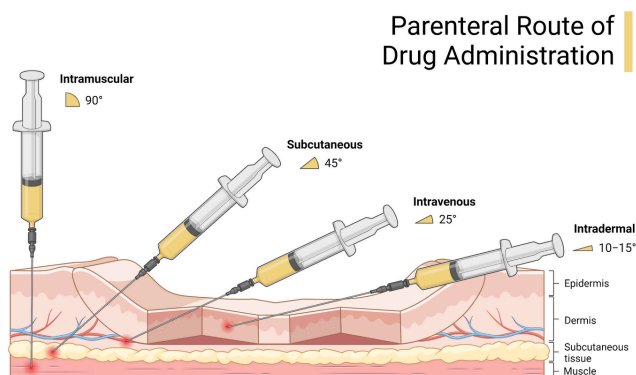
30. A medication is available in a concentration of 16 mg/mL. The prescribed dose for a patient is 48 mg. How many milliliters of the medication should be administered?

    A) 2.5 mL
    B) 3 mL
    C) 3.5 mL
    D) 4 mL

31. Calculate the dosage of a parenteral medication. A patient weighs 60 kg and is prescribed a medication at a dosage of 0.5 mg/kg. How many milligrams of the medication should be administered?

32. Calculate the volume of a medication to be administered. A medication is available in a concentration of 25 mg/mL. The prescribed dose for a patient is 75 mg. How many milliliters of the medication should be administered?

33. Calculate the infusion rate of a medication. A medication is ordered to be administered at a rate of 15 mg/h. The available concentration of the medication is 30 mg/mL. What is the infusion rate in milliliters per hour?

34. Calculate the dosage of a parenteral medication. A patient weighs 70 kg and is prescribed a medication at a dosage of 0.5 mg/kg. How many milligrams of the medication should be administered?

35. Calculate the volume of a medication to be administered. A medication is available in a concentration of 20 mg/mL. The prescribed dose for a patient is 60 mg. How many milliliters of the medication should be administered?

Answers

11. Administration of Insulin

1. Which of the following is not a type of insulin?
   A) Rapid-acting insulin
   B) Long-acting insulin
   C) Intermediate-acting insulin
   D) Diabetic-acting insulin

2. What is the most appropriate site for insulin injection?
   A) Abdomen
   B) Thigh
   C) Upper arm
   D) Buttocks

3. How should insulin vials be stored?
   A) In the freezer
   B) In direct sunlight
   C) At room temperature
   D) In the refrigerator

4. Which insulin should be drawn into the syringe first when mixing insulin?
   A) Regular insulin
   B) NPH insulin
   C) Lispro insulin
   D) Glargine insulin

5. What is the appropriate technique for injecting insulin?
     A) Inject slowly
     B) Inject at a 90-degree angle
     C) Shake the syringe before injection
     D) Inject directly into a vein

6. What are the signs and symptoms of hypoglycemia?
     A) High blood sugar levels
     B) Increased thirst
     C) Sweating and shakiness
     D) Blurred vision

7. What should be done if a patient experiences hypoglycemia?
     A) Administer more insulin
     B) Provide a sugary snack or drink
     C) Skip the next insulin dose
     D) Increase physical activity

8. When should blood glucose levels be monitored after insulin administration?
     A) Before meals only
     B) Before bedtime only
     C) Before and after meals
     D) Once a day in the morning

Compatible with "Short" 10ml Vials
Please make sure that you select the correct vial protector size

Fiasp Humulin Humalog Novolog
Lispro Vetsulin Novolin Tresiba
Levemir NovoRapid Lyumjev Caninsulin

9. Which of the following is a rapid-acting insulin?
    A) NPH insulin
    B) Regular insulin
    C) Insulin Glargine
    D) Insulin Detemir

10. What is the onset of action for rapid-acting insulin?
    A) 15-30 minutes
    B) 5 - 10 minutes
    C) 1-2 hours
    D) 2-4 hours

11. Which of the following is an intermediate-acting insulin?
    A) Insulin Lispro
    B) Insulin Aspart
    C) Insulin Glargine
    D) NPH insulin

12. What is the peak effect of intermediate-acting insulin?
    A)1-2 hours
    B) 2-4 hours
    C) 4-12 hours
    D) 8-12 hours

13. Which of the following is a long-acting insulin?
    A) Insulin Lispro
    B) Insulin Lspart
    C) Insulin Glargine
    D) Regular insulin

14. What is the duration of action for long-acting insulin?
    A) 6-8 hours
    B) 12-16 hours
    C) 16-20 hours
    D) 20 to 24 hours

15. Which type of insulin can be mixed with rapid-acting insulin?
    A) Intermediate-acting insulin
    B) Long-acting insulin
    C) Premixed insulin
    D) None of the above

16. What is the concentration of U-100 insulin?
    A) 100 units per mL
    B) 50 units per mL
    C) 200 units per mL
    D) 500 units per mL

17. How many milliliters are in a 10 mL vial of U-100 insulin?
   A) 10 mL
   B) 100 mL
   C) 1000 mL
   D) 10000 mL

18. Which of the following premixed insulin combinations is correct?
   A) 70/30 (70% Regular insulin, 30% NPH insulin) B)
   50/50 (50% Lispro insulin, 50% Aspart insulin) C)
   90/10 (90% Glargine insulin, 10% Detemir insulin) D)
   60/40 (60% Regular insulin, 40% Lispro insulin)

19. What is the concentration of U-500 insulin?
   A) 100 units per mL
   B) 200 units per mL
   C) 300 units per mL
   D) 500 units per mL

20. How many milliliters are in a 5 mL vial of U-500 insulin?
   A) 5 mL
   B) 10 mL
   C) 25 mL
   D) 50 mL

20 units

Injection air into
the NPH vial

20 units
air

Cloudy

10 units

Injection air into
the regular
insulin vial

10 units
air

Clear

Air

Clear

10 units
regular
insulin

Withdrawing
regular insulin

Air

Cloudy

20 units NPH insulin
10 units regular insulin
30 units total dosage

Withdrawing
NPH insulin
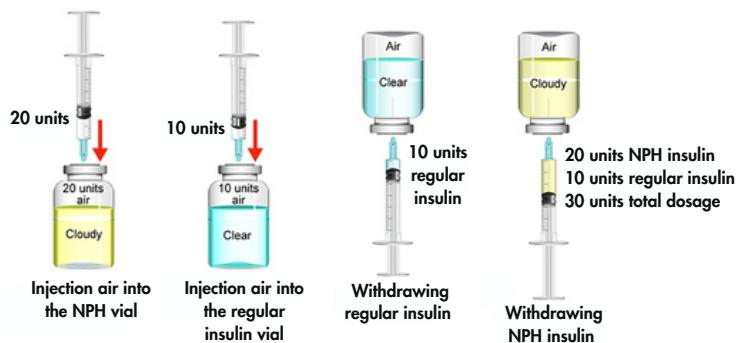
21. Which of the following is a true statement about premixed insulin?
    A) It is available in U-100 and U-500 concentrations.
    B) It should be stored in the refrigerator.
    C) It is administered using an insulin pump.
    D) It combines short-acting and long-acting insulin.

22. What is the recommended storage temperature for insulin?
    A) Room temperature (20-25°C or 68-77°F)
    B) Refrigerator temperature (2-8°C or 36-46°F)
    C) Freezer temperature (-20°C or -4°F)
    D) Any temperature is acceptable

23. Which of the following is a disadvantage of premixed insulin?
    A) It is more expensive than other types of insulin.
    B) It requires multiple injections throughout the day.
    C) It may not provide flexible dosing options.
    D) It has a longer duration of action.

24. What is the recommended duration of use for an opened vial of insulin?
    A) 7 days
    B) 14 days
    C) 28 days
    D) 30 days

25. Which of the following is the correct technique for administering insulin?
   A) Intramuscular injection
   B) Subcutaneous injection
   C) Intravenous injection
   D) Intradermal injection

26. Insulin is commonly administered using which type of syringe?
   A) 1 mL syringe
   B) 3 mL syringe
   C) 5 mL syringe
   D) 10 mL syringe

27. Which of the following factors should be considered when determining the appropriate insulin dose?
   A) Age
   B) Weight
   C) Blood sugar level
   D) All of the above

28. Which of the following insulin types has the fastest onset of action?
   A) Regular insulin
   B) NPH insulin
   C) Long-acting insulin
   D) Rapid-acting insulin

29. How should insulin be stored?
    A) In the freezer
    B) In direct sunlight
    C) In the refrigerator
    D) At room temperature

30. What is the purpose of rotating injection sites when administering insulin?
    A) To prevent infection
    B) To minimize pain
    C) To ensure consistent absorption
    D) All of the above

31. Which of the following is a potential complication of insulin administration?
    A) Hypoglycemia
    B) Hyperglycemia
    C) Allergic reaction
    D) Insulin resistance

32. How often should blood glucose levels be monitored in patients receiving insulin therapy?
    A) Once a day
    B) Twice a day
    C) Before meals and at bedtime
    D) Every hour

33. What is the correct order for drawing up insulin from two vials?
   A) Draw up regular insulin first, then draw up NPH insulin
   B) Draw up NPH insulin first, then draw up regular insulin
   C) Draw up both insulins simultaneously
   D) It doesn't matter, as long as both insulins are administered

34. Which of the following statements about sliding scale insulin is true?
   A) It is a fixed dose of insulin administered at regular intervals
   B) It is based on the patient's blood glucose levels before meals and at bedtime
   C) It is only used in emergency situations
   D) It is not commonly used in clinical practice

35. How often should blood glucose levels be monitored in patients receiving insulin therapy?
   A) Once a day
   B) Twice a day
   C) Before meals and at bedtime
   D) Every hour

36. What is the correct order for drawing up insulin from two vials?
   A) Draw up regular insulin first, then draw up NPH insulin
   B) Draw up NPH insulin first, then draw up regular insulin
   C) Draw up both insulins simultaneously
   D) It doesn't matter, as long as both insulins are administered

37. Examine the provided images and identify the correct answers.
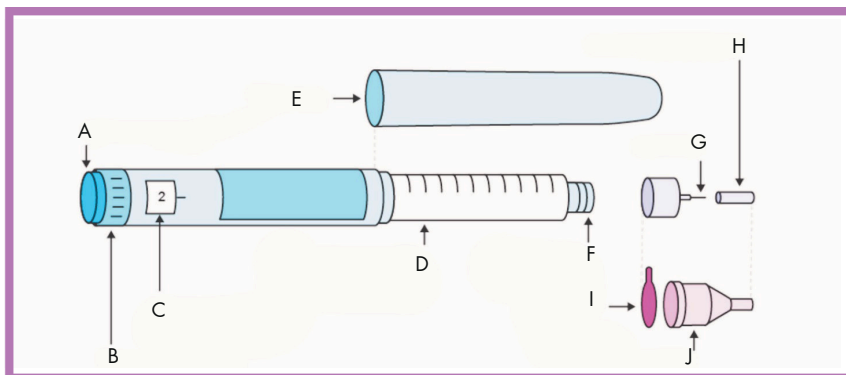
38. Examine the provided images and identify the correct answers.

BRAND NAME	INSULIN TYPE
A1 A2	70% Intermediate-acting/30% short-acting
B	75% Intermediate-acting/25% rapid-acting
C	50% Intermediate-acting/50% rapid-acting
D	70% Intermediate-acting/30% rapid-acting

Mixing Insulin

CLOUDY	CLEAR	CLEAR	CLOUDY
air in the cloudy	air in the clear	draw up the clear	draw up the cloudy
		Regular	NPH
NPH	Regular		
STEP 1	STEP 2	STEP 3	STEP 4
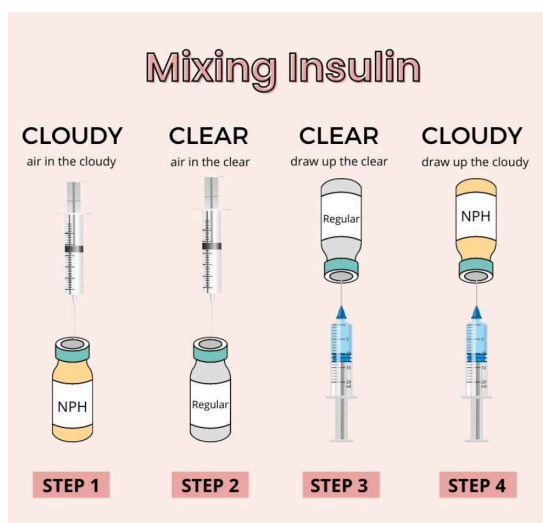
Answers

12. Preparing Powdered Parenteral Medications

1. Which of the following is a step in preparing powdered parenteral medications?
   A. Mix the powder with water
   B. Shake the vial vigorously
   C. Add the powder to the syringe
   D. Use a sterile needle to withdraw the medication

2. What is the purpose of preparing powdered parenteral medications?
   A. To ensure accurate dosage calculation
   B. To increase the effectiveness of the medication
   C. To prevent contamination of the medication
   D. To improve the patient's compliance with the treatment

3. Which of the following is NOT true about preparing powdered parenteral medications?
   A. The powder should be dissolved completely before administration
   B. The medication should be prepared in a sterile environment
   C. The dosage should be calculated based on the patient's weight
   D. The vial should be gently inverted to mix the powder and diluent

4. What is the recommended method for reconstituting powdered parenteral medications?
    A. Add the diluent to the powder
    B. Add the powder to the diluent
    C. Shake the vial vigorously
    D. Use a filter needle to withdraw the medication

5. Which of the following is a safety precaution when preparing powdered parenteral medications?
    A. Always discard unused medication
    B. Use a clean needle for each dose
    C. Store the medication in a cool place
    D. Use a syringe with a Luer-lock tip

6. How should the reconstituted powdered medication be labeled?
    A. With the patient's name and date of birth
    B. With the expiration date of the medication
    C. With the concentration of the medication
    D. With the manufacturer's name and address
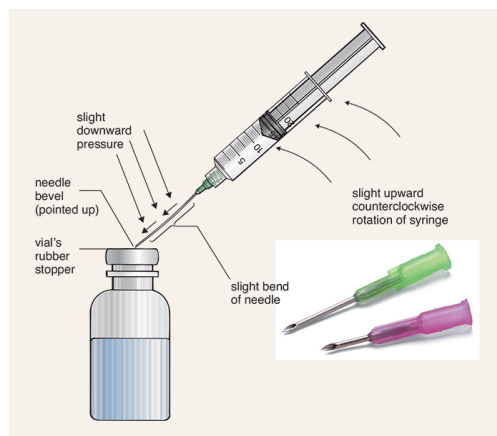
7. What should be done if there are particles or discoloration in the reconstituted powdered parenteral medication?
    A. Administer the medication as usual
    B. Shake the vial vigorously to dissolve the particles
    C. Discard the medication and start over
    D. Filter the medication using a sterile filter

8. Which of the following is a common diluent used for reconstituting powdered parenteral medications?
    A. Normal saline
    B. Sterile water
    C. Dextrose solution
    D. Ringer's lactate solution

9. What is the purpose of using a filter needle when withdrawing reconstituted powdered parenteral medications?
    A. To prevent the medication from leaking
    B. To remove any particles or debris from the medication
    C. To ensure accurate dosage measurement
    D. To minimize the risk of needlestick injuries

10. When should the reconstituted powdered parenteral medication be administered?
    A. Immediately after reconstitution
    B. Within 24 hours of reconstitution
    C. Within 48 hours of reconstitution
    D. Within 72 hours of reconstitution

11. What is the purpose of calculating the dosage of powdered parenteral medications?

A. To ensure accurate administration of the medication B. To determine the appropriate diluent for reconstitution C. To prevent contamination of the medication D. To comply with legal and ethical standards

12. Which of the following is a step in preparing powdered parenteral medications?

A. Use a blunt needle to withdraw the medication B. Shake the vial vigorously to mix the powder and diluent C. Store the reconstituted medication in the refrigerator D. Disinfect the vial with alcohol before use

13. Which of the following is a safety precaution when preparing powdered parenteral medications?

A. Wear gloves during the preparation process
B. Use a syringe with a Luer-slip tip
C. Store the medication in direct sunlight
D. Reconstitute the medication in a non-sterile environment

14. What should be done if the vial of powdered parenteral medication is expired?

A. Use the medication as usual
B. Discard the medication and obtain a new vial
C. Shake the vial vigorously to dissolve the powder
D. Add more diluent to compensate for the expired medication

15. What is the purpose of using a filter needle when withdrawing reconstituted powdered parenteral medications?

A. To ensure accurate dosage measurement
B. To prevent the medication from leaking
C. To remove any particles or debris from the medication
D. To minimize the risk of needlestick injuries

Amount of Diluent to be Added		
Vial Dosage Size	250 mg/mL	350 mg/mL
250 mg	0.9 mL	—
500 mg	1.8 mL	1.0 mL
1 g	3.6 mL	2.1 mL
2 g	7.2 mL	4.2 mL

The prescriber ordered 250 mg.

Inject 1.8 mL of air into sterile water.

Empty

Water

Withdraw 1.8 mL of sterile water.

Water

Inject 1.8 mL of sterile water into the ceftriaxone.

ceftriaxone

This results in a solution of 250 mg of ceftriaxone per mL.

Withdraw 1 mL of ceftriaxone solution for the ordered dose of 250 mg.

16. Which of the following is a common diluent used for reconstituting powdered parenteral medications?

     A. Normal saline

     B. Sterile water

     C. Dextrose solution

     D. Ringer's lactate solution

17. What should be done if the reconstituted powdered parenteral medication is cloudy or discolored?

     A. Administer the medication as usual

     B. Shake the vial vigorously to dissolve the particles

     C. Discard the medication and start over

     D. Filter the medication using a sterile filter

18. What is the purpose of calculating the total volume of the reconstituted powdered parenteral medication?

     A. To determine the concentration of the medication

     B. To calculate the infusion rate of the medication

     C. To ensure accurate dosage measurement

     D. To comply with legal and ethical standards

NDC 39822-0278-1

Bacitracin
for Injection, USP

**50,000 units
per vial**

For Intramuscular Use

℞ only

Each vial contains 50,000 units Bacitracin.
Store unreconstituted product in a refrigerator
2° to 8°C (36° to 46°F).
DOSAGE AND USE:
See accompanying prescribing information. Reconstitution with
9.8 mL of sodium chloride injection containing 2 percent procaine
hydrochloride will result in a concentration of 5,000 units per mL.
Diluents containing parabens should not be used.
Lyophilized in container.
Store solution in a refrigerator 2° to 8°C (36° to 46°F).
Discard after 1 week.
Reconstituted _____

19. The order is for bacitracin 9,000 units IM now. After reconstitution, the nurse will administer:
   A. 0.2 mL
   B. 0.18 mL
   C.1.2 mL
   D. 1.8 mL

20. The order is for bacitracin 6,500 units IM now. After reconstitution, the nurse will administer:
   A. 1.2 mL
   B. 0.13 mL
   C. 1.3 mL
   D. 0.12 mL

21. What is the route of administration for the medication in this exercise?
   A. Intravenous (IV)
   B. Intramuscular (IM)
   C. Subcutaneous (SC)
   D. Oral (PO)

This vial contains: oxacillin sodium monohydrate equivalent to 2 g oxacillin. The sodium content is 57.30 mg [2.5 mEq] per g oxacillin. Buffered with 20 mg disodium hydrogen phosphate per g oxacillin.
For I.M. use add 11.5 mL Sterile WFI. Each 1.5 mL of soln. contains 250 mg oxacillin.
Usual Dosage: Adults - 250 mg to 500 mg I.M. every 4 to 6 hours. READ ACCOMPANYING INSERT. Discard soln. after 3 days at room temp. or 7 days refrigerated.

Rx only   NDC 55150-128-24

Oxacillin
for Injection, USP

2 grams per vial

Sterile

Buffered - For Intramuscular or Intravenous use

Store dry powder at 20° to 25°C (68° to 77°F) [see USP Controlled Room Temp].

Code: TS/DRUGS/57/2003

Batch :

Expiry:

P1431479

22. The dosage strength of the reconstituted oxacillin is:
   A. 500 mg/1.5 mL
   B. 250 mg/1.5 mL
   C. 2 g/11.5 mL
   D. 2 g/1.5 mL

23. If the physician orders 0.5 g of oxacillin IM q.6h, the nurse will give:
   A. 3 mL
   B. 2.6 mL
   C. 2.9 mL
   D. 0.3 mL

24. If the physician orders 0.4 g of oxacillin IM q.6h, the nurse will give:
   A. 0.24 mL
   B. 2.4 mL
   C. 0.48 mL
   D. 4.8 mL

25. The physician orders penicillin G potassium 400,000 units q.6h. IM. The nurse has the following vial of penicillin G potassium.

NDC 0781-6153-95
Penicillin G Sodium for Injection, USP
5,000,000 Units*
(5 million units)
Rx Only
For IM or IV use
10 Vials

*Each vial contains Penicillin G sodium, equivalent to 5,000,000 units (5 million units) of penicillin G as the sodium salt, with 1.68 mEq of sodium per million units of penicillin G.

Usual Dosage: See package insert.

Store dry powder at 20° to 25°C (68° to 77°F) [see USP Controlled Room Temperature]. Shake vial vigorously after all the diluent has been added.

Preparation of solution – 5 million units

Diluent Added	Final Concentration
8 mL	500,000 units/mL
3 mL	1,000,000 units/mL

Sterile constituted solution may be kept in refrigerator 2° to 8°C for 3 days without significant loss of potency.

46189861

Identify the amount of diluent to add to the vial to make the most concentrated medication:_____
Dosage strength:_____
Administer: _____
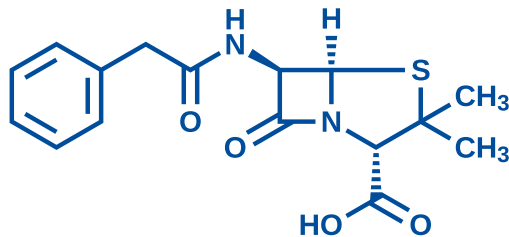
Answers

13. Therapy and Administration of Intravenous Medications

1. Calculate the flow rate in mL/hr

Electronic Medical Record   **Provider Orders** ❌

Name	C. Patient	Age	49	Gender	M	DOB	04-18-xx
MR #	49456	Allergies	NKDA			Room	148

Provider M. Physician, MD   **Date** 04-09-xx ⬅ ➡

▼ **Order**

Start 1 L 0.9% NaCl @ 150 mL/hr

2. Calculate the flow rate in mL/hr

Electronic Medical Record   **Provider Orders** ❌

Name	C. Patient	Age	49	Gender	M	DOB	04-18-xx
MR #	49456	Allergies	NKDA			Room	148

Provider M. Physician, MD   **Date** 04-09-xx ⬅ ➡

▼ **Order**

1 L D5 1/2 NS every 10 hours

3. Calculate the flow rate in gtt/min

Electronic Medical Record   **Provider Orders** ❌

Name C. Patient	**Age** 49	**Gender** M	**DOB** 04-18-xx	
MR # 49456	**Allergies** NKDA		**Room** 148	

Provider M. Physician, MD   **Date** 04-09-xx ⬅ ➡

▽ **Order**

1 L D 5 1/2 NS with 30 mEq KCl q.10h

4. Calculate the flow rate in gtt/min

Electronic Medical Record   **Provider Orders** ❌

Name C. Patient	**Age** 49	**Gender** M	**DOB** 04-18-xx	
MR # 49456	**Allergies** NKDA		**Room** 148	

Provider M. Physician, MD   **Date** 04-09-xx ⬅ ➡

▽ **Order**

Start 1000 mL LR @ 125 mL/hr

5. Calculate the flow rate in mL/hr

Electronic Medical Record — **Provider Orders** ✖

Name	C. Patient	**Age** 49	**Gender** M	**DOB**	04-18-xx	
MR #	49456	**Allergies**	NKDA		**Room**	148
Provider	M. Physician, MD		**Date** 04-09-xx	← →		

▼ **Order**

1 L D5 NS with 20 mEq KCl q.8h

6. Calculate the flow rate in mL/hr

Electronic Medical Record — **Provider Orders** ✖

Name	C. Patient	**Age** 49	**Gender** M	**DOB**	04-18-xx	
MR #	49456	**Allergies**	NKDA		**Room**	148
Provider	M. Physician, MD		**Date** 04-09-xx	← →		

▼ **Order**

1000 mL D5 RL q.12h

7. Calculate the flow rate in gtt/min

Electronic Medical Record   **Provider Orders**

| Name | C. Patient | Age | 49 | Gender | M | DOB | 04-18-xx |

MR #   49456   **Allergies**   NKDA   **Room**   148

Provider   M. Physician, MD   **Date**   04-09-xx

Order

1 L D 5 /0.45% NaCl q.6h

8. Calculate the flow rate in gtt/min

Electronic Medical Record   **Provider Orders**

| Name | C. Patient | Age | 49 | Gender | M | DOB | 04-18-xx |

MR #   49456   **Allergies**   NKDA   **Room**   148

Provider   M. Physician, MD   **Date**   04-09-xx

Order

IV: 500 mL D5 RL q.12h

9. Calculate the flow rate in mL/hr

Electronic Medical Record   **Provider Orders** ☒

| Name | C. Patient | Age 49 | Gender M | DOB 04-18-xx |

| MR # | 49456 | Allergies | NKDA | Room 148 |

Provider M. Physician, MD   Date 04-09-xx ← →

▼ **Order**

500 mL 0.9% NaCl q.6h

10. Calculate the flow rate in gtt/min

Electronic Medical Record   **Provider Orders** ☒

| Name | C. Patient | Age 49 | Gender M | DOB 04-18-xx |

| MR # | 49456 | Allergies | NKDA | Room 148 |

Provider M. Physician, MD   Date 04-09-xx ← →

▼ **Order**

1 unit whole blood (250 mL) over 4 hr

11. The physician orders 3 L D5/0.45% NaCl with 20 mEq KCl to infuse over 24 hours. How many mL will the patient receive per hour?

   A) 125 mL/hr
   B) 150 mL/hr
   C) 175 mL/hr
   D) 200 mL/hr

12. A patient requires 0.5 mg/kg of a medication. The patient weighs 70 kg. How many milligrams of the medication should the nurse administer?

   A) 25 mg
   B) 35 mg
   C) 40 mg
   D) 45 mg

13. The physician orders 500 mg of a medication to be administered over 2 hours. The medication is available in a concentration of 250 mg/5 mL. How many milliliters of the medication should the nurse administer per hour?

   A) 12.5 mL/hr
   B) 5 mL/hr
   C) 37.5 mL/hr
   D) 50 mL/hr

14. The physician orders 1,000 mL of 0.9% NaCl to infuse over 8 hours. The drop factor of the administration set is 15 gtt/mL. What should be the drip rate in drops per minute?

    A) 31 gtt/min
    B) 42 gtt/min
    C) 63 gtt/min
    D) 125 gtt/min

15. The physician orders 50 mg of a medication to be administered intramuscularly. The medication is available in a concentration of 100 mg/mL. How many milliliters of the medication should the nurse administer?

    A) 0.25 mL
    B) 0.5 mL
    C) 1 mL
    D) 2 mL

16. The physician orders 500 mL of 5% Dextrose in water to be infused over 4 hours. The drop factor of the administration set is 20 gtt/mL. What should be the drip rate in drops per minute?

    A) 21 gtt/min
    B) 31 gtt/min
    C) 42 gtt/min
    D) 63 gtt/min

17. A medication is available in a vial of 100 mg/mL. The physician orders 75 mg of the medication. How many milliliters of the medication should the nurse administer?

   A) 0.5 mL
   B) 0.75 mL
   C) 1 mL
   D) 1.5 mL

18. The physician orders 2,000 units of a medication to be administered subcutaneously. The medication is available in a concentration of 500 units/mL. How many milliliters of the medication should the nurse administer?

   A) 2 mL
   B) 3 mL
   C) 4 mL
   D) 5 mL

19. The physician orders 1 g of a medication to be administered over 30 minutes. The medication is available in a concentration of 500 mg/10 mL. How many milliliters of the medication should the nurse administer per hour?

   A) 30 mL/hr
   B) 40 mL/hr
   C) 120 mL/hr
   D) 240 mL/hr

20. The physician orders 750 mg of a medication to be administered over 4 hours. The medication is available in a concentration of 250 mg/5 mL. How many milliliters of the medication should the nurse administer per hour?

   A) 12.5 mL/hr
   B) 25 mL/hr
   C) 3.75 mL/hr
   D) 50 mL/hr

21. The physician orders 1,500 mL of 0.9% NaCl to infuse over 6 hours. The drop factor of the administration set is 20 gtt/mL. What should be the drip rate in drops per minute?

   A) 25 gtt/min
   B) 83 gtt/min
   C) 75 gtt/min
   D) 100 gtt/min

22. The physician orders 60 mg of a medication to be administered intramuscularly. The medication is available in a concentration of 20 mg/mL. How many milliliters of the medication should the nurse administer?

   A) 2 mL
   B) 3 mL
   C) 4 mL
   D) 5 mL

23.
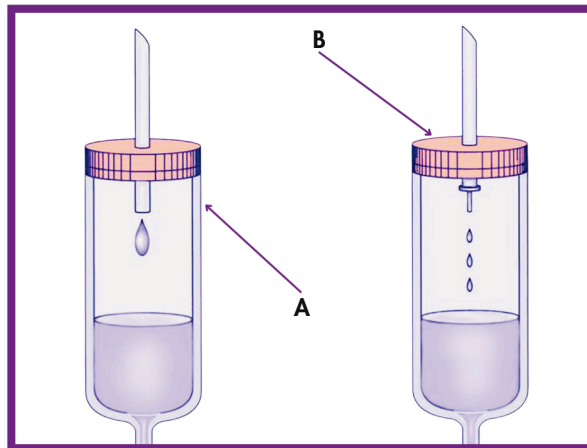
24.

Answers

14. Fluid Intake and Output Management
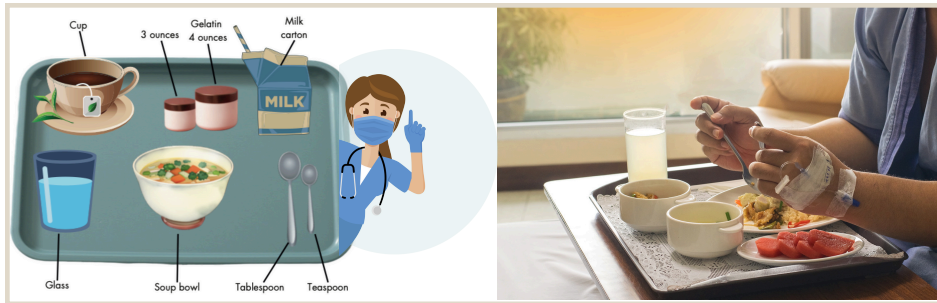
1. The patient drinks 1 cup of water. This is equivalent to _____ mL.

2. The prescribed medication dosage is 0.5 teaspoons. This is equivalent to _____ mL.

3. The patient consumes 2 tablespoons of cough syrup. This is equivalent to _____ mL.

4. The doctor orders 4 ounces of medication. This is equivalent to _____ mL.

5. The patient is instructed to take 1 tablespoon of liquid medication. This is equivalent to _____ mL.

6. The patient is prescribed 2.5 teaspoons of liquid medication. This is equivalent to _____ mL.

7. The doctor orders 3 cups of oral rehydration solution. This is equivalent to _____ mL.

8. The patient is instructed to take 1.5 tablespoons of cough syrup. This is equivalent to _____ mL.

9. The prescribed medication dosage is 0.75 ounces. This is equivalent to _____ mL.

10. The patient drinks 1.5 cups of water. This is equivalent to _____ mL.

11. The patient is prescribed 2.75 teaspoons of liquid medication. This is equivalent to _____ mL.

12. The doctor orders 5 ounces of medication. This is equivalent to _____ mL.

13. The patient is instructed to take 2.5 tablespoons of cough syrup. This is equivalent to _____ mL.

14. The prescribed medication dosage is 1.25 cups. This is equivalent to _____ mL.

15. The patient drinks 0.5 cups of water. This is equivalent to _____ mL.

16. The doctor orders 6.5 teaspoons of liquid medication. This is equivalent to _____ mL.

17. The patient is instructed to take 3.75 tablespoons of cough syrup. This is equivalent to _____ mL.

18. The patient drinks 1 cup of water. This is equivalent to _____ mL.

19. The prescribed medication dosage is 0.5 teaspoons. This is equivalent to _____ mL.

20. The patient consumes 2 tablespoons of cough syrup. This is equivalent to _____ mL.

21. The doctor orders 4 ounces of medication. This is equivalent to _____ mL.

22. The patient is instructed to take 1 tablespoon of liquid medication. This is equivalent to _____ mL.

23. The patient is prescribed 2.5 teaspoons of medication. This is equivalent to _____ mL.

24. The doctor orders 3 cups of oral rehydration solution. This is equivalent to _____ mL.

25. The patient is instructed to take 1.5 tablespoons of cough syrup. This is equivalent to _____ mL.

26. The prescribed medication dosage is 0.75 ounces. This is equivalent to _____ mL.

27. The patient drinks 1.5 cups of water. This is equivalent to _____ mL.

28. The doctor orders 6.5 ounces of medication. This is equivalent to _____ mL.

29. The patient is prescribed 3.25 tablespoons of liquid medication. This is equivalent to _____ mL.

30. The patient is instructed to take 2 cups of oral rehydration solution. This is equivalent to _____ mL.

31. The patient voided 280 mL at 8:00 AM and 360 at 2:00 PM. Complete the patient's output record.

Name C. Patient   MR 49231   Date 10-2-xx

Intake and Output Worksheet

Shift	Oral	Other	Urine	Emesis	Drainage
7-3					
Total (mL)					
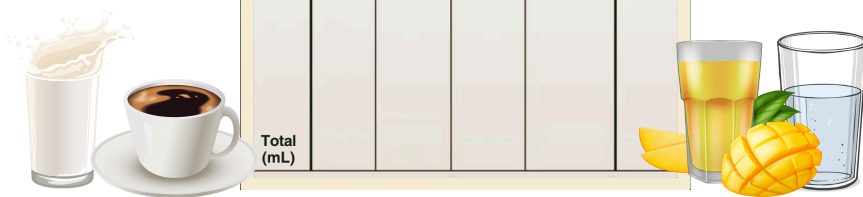
32. The patient had emesis of 320 mL at 10:00 AM and voided 225 at 12:00 PM and 355 at 2:00 PM. Completet he patient's output record.

Name C. Patient   MR 49231   Date 10-2-xx

Intake and Output Worksheet
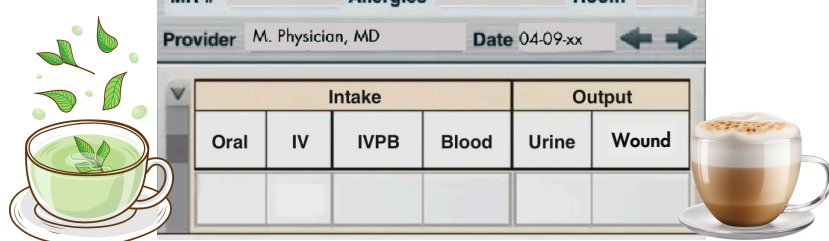
Shift	Oral	Other	Urine	Emesis	Drainage
7-3					
Total (mL)					

33. For breakfast, the patient took one 200 mL cup of coffee, 140 mL of milk, and a 4 oz glass of juice. For lunch, the patient took 340 mL of water and 6 oz of tea. The patient has a wound drainage device. At the end of the shift, the nurse emptied 30 mL from the wound drainage device. The patient voided 225 mL at 8:00 AM and 350 mL at 2:00 PM. Use the I & O worksheet to record the patient's intake and output for the 7 to 3 shift
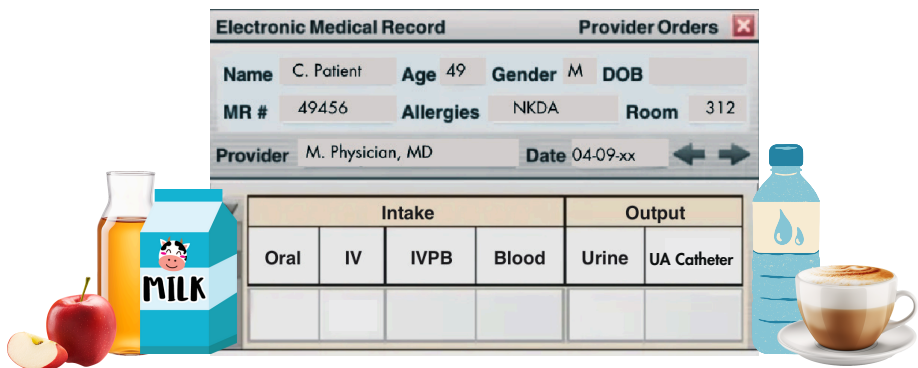
Name _C. Patient_ MR _49231_ Date _10-2-xx_

Intake and Output Worksheet

Shift	Oral	Other	Urine	Emesis	Drainage
7-3					
Total (mL)					

34. For breakfast, the patient drank one 180 mL cup of coffee and a 4 oz glass of juice. For lunch, the patient ate 3 tsp of gelatin and drank 6 oz of tea. The patient voided 525 mL at 8:00 AM and 300 mL at 2:00 PM. The nurse emptied 35 mL of wound drainage for the shift. Record the total intake and output on the electronic record for the 0700 to 1500 (7 to 3) shift.

Electronic Medical Record   **Provider Orders** ⊠

Name _C. Patient_ Age _49_ Gender _M_ DOB

MR # _49456_ Allergies _NKDA_ Room _312_

Provider _M. Physician, MD_ Date _04-09-xx_ ← →

Intake				Output	
Oral	IV	IVPB	Blood	Urine	Wound

35. For breakfast, the patient drank 6 tsp of milk, 240 mL of coffee, and 3 ounces of juice. For lunch, the patient drank an 8 ounce container of milk and 550 mL of water during the shift. The patient has a continuous bladder irrigation infusing at 60 mL/hr from 10:00 AM to 15:00 PM. At 1500, the nurse emptied 1,025 mL from the urinary drainage bag. Record the total intake and output on electronic record for the 0700 to 1500 (7 to 3) shift

Electronic Medical Record   **Provider Orders** ☒

Name	C. Patient	Age	49	Gender	M	DOB	
MR #	49456	Allergies	NKDA		Room	312	
Provider	M. Physician, MD			Date	04-09-xx		

	Intake				Output	
Oral	IV	IVPB	Blood	Urine	UA Catheter

36. Calculate the IV intake for the 0700 to 1100 shift. The IV is running at a rate of 50 mL/hr for the entire shift.

37. Determine the total intake from oral fluids for the 0800 to 1200 shift. The patient drinks 1 cup of water every 2 hours.

38. Calculate the total intake for the 0900 to 1500 shift. The patient drinks 8 ounces of juice every 3 hours.

Answers

15. Dosage for Pediatric and Elderly Population

1. A nurse is preparing a medication for a pediatric patient. The prescribed dose is 0.05 mg/kg. The child weighs 15 kg. How many milligrams of medication should the nurse administer?
   a) 0.75 mg
   b) 0.85 mg
   c) 0.95 mg
   d) 1.05 mg

2. An elderly patient is prescribed a medication at a dose of 0.2 mg/kg. The patient weighs 60 kg. How many milligrams of medication should the nurse administer?
   a) 8 mg
   b) 10 mg
   c) 12 mg
   d) 14 mg

3. A pediatric patient requires a medication dosage of 2 mg/kg. The child weighs 18 pounds. The medication is available in a concentration of 10 mg/mL. How many milliliters of medication should the nurse administer?
   a) 0.9 mL
   b) 1.2 mL
   c) 1.8 mL
   d) 2.4 mL

4. An elderly patient requires a medication dosage of 0.5 mg/kg. The patient weighs 150 pounds. The medication is available in a concentration of 2.5 mg/mL. How many milliliters of medication should the nurse administer?
   a) 2 mL
   b) 13.6 mL
   c) 4 mL
   d) 23.6 mL

5. A pediatric patient is prescribed a medication at a dose of 0.15 mg/kg. The child weighs 25 kg. The medication is available in a concentration of 0.5 mg/mL. How many milliliters of medication should the nurse administer?
   a) 17 mL
   b) 20 mL
   c) 22 mL
   d) 7.5 mL

6. An elderly patient is prescribed a medication at a dose of 0.1 mg/kg. The patient weighs 70 kg. The medication is available in a concentration of 0.2 mg/mL. How many milliliters of medication should the nurse administer?
   a) 7 mL
   b) 10 mL
   c) 14 mL
   d) 35 mL

7. A pediatric patient requires a medication dosage of 1.5 mg/kg. The child weighs 30 pounds. The medication is available in a concentration of 2 mg/mL. How many milliliters of medication should the nurse administer?
   a) 10 mL
   b) 15 mL
   c) 17 mL
   d) 20 mL

8. An elderly patient requires a medication dosage of 0.3 mg/kg. The patient weighs 180 pounds. The medication is available in a concentration of 1 mg/mL. How many milliliters of medication should the nurse administer?

   a) 24 mL
   b) 15.5 mL
   c) 7 mL
   d) 24.5mL

9. A pediatric patient is prescribed a medication at a dose of 0.25 mg/kg. The child weighs 20 kg. The medication is available in a concentration of 0.4 mg/mL. How many milliliters of medication should the nurse administer?
   a) 10 mL
   b) 12.5 mL
   c) 15 mL
   d) 12 mL

10. An elderly patient is prescribed a medication at a dose of 0.15 mg/kg. The patient weighs 90 kg. The medication is available in a concentration of 0.3 mg/mL. How many milliliters of medication should the nurse administer?

   a) 18 mL
   b) 20 mL
   c) 45 mL
   d) 30 mL

11. A pediatric patient requires a medication dosage of 1.2 mg/kg. The child weighs 25 pounds. The medication is available in a concentration of 5 mg/mL. How many milliliters of medication should the nurse administer?

   a) 1 mL
   b) 2.7 mL
   c) 3 mL
   d) 4.7 mL

12. An elderly patient requires a medication dosage of 0.4 mg/kg. The patient weighs 160 pounds. The medication is available in a concentration of 1.5 mg/mL. How many milliliters of medication should the nurse administer?

   a) 10 mL
   b) 19 mL
   c) 14 mL
   d) 7 mL

13. A pediatric patient is prescribed a medication at a dose of 0.3 mg/kg. The child weighs 30 kg. The medication is available in a concentration of 0.6 mg/mL. How many milliliters of medication should the nurse administer?
 a) 15 mL
 b) 18 mL
 c) 20 mL
 d) 22 mL

14. An elderly patient is prescribed a medication at a dose of 0.25 mg/kg. The patient weighs 100 kg. The medication is available in a concentration of 0.5 mg/mL. How many milliliters of medication should the nurse administer?
 a) 10 mL
 b) 12 mL
 c) 15 mL
 d) 20 mL

15. A pediatric patient requires a medication dosage of 2.5 mg/kg. The child weighs 40 pounds. The medication is available in a concentration of 5 mg/mL. How many milliliters of medication should the nurse administer?
 a) 1 mL
 b) 2 mL
 c) 3 mL
 d) 4 mL

16. An elderly patient requires a medication dosage of 0.2 mg/kg. The patient weighs 120 pounds. The medication is available in a concentration of 0.4 mg/mL. How many milliliters of medication should the nurse administer?

   a) 6 mL
   b) 8 mL
   c) 10 mL
   d) 12 mL

17. A pediatric patient is prescribed a medication at a dose of 0.4 mg/kg. The child weighs 35 kg. The medication is available in a concentration of 1 mg/mL. How many milliliters of medication should the nurse administer?

   a) 14 mL
   b) 16 mL
   c) 18 mL
   d) 20 mL

18. An elderly patient is prescribed a medication at a dose of 0.3 mg/kg. The patient weighs 140 pounds. The medication is available in a concentration of 0.6 mg/mL. How many milliliters of medication should the nurse administer?

   a) 7 mL
   b) 10 mL
   c) 12 mL
   d) 15 mL

19. A pediatric patient requires a medication dosage of 1.8 mg/kg. The child weighs 50 pounds. The medication is available in a concentration of 3 mg/mL. How many milliliters of medication should the nurse administer?

      a) 3 mL
      b) 14 mL
      c) 5 mL
      d) 16 mL

20. An elderly patient requires a medication dosage of 0.15 mg/kg. The patient weighs 80 kg. The medication is available in a concentration of 0.2 mg/mL. How many milliliters of medication should the nurse administer?

      a) 12 mL
      b) 60 mL
      c) 18 mL
      d) 30 mL

21. Which of the following is a common dosage delivery device used for liquid medications in pediatric patients?

      a) Syringe
      b) Inhaler
      c) Transdermal patch
      d) Tablet

22. Which of the following is NOT a type of syringe commonly used for liquid medication administration in pediatric patients?
　　a) Oral syringe
　　b) Insulin syringe
　　c) Tuberculin syringe
　　d) Nasal syringe

23. Which of the following is a benefit of using an oral syringe for liquid medication administration in pediatric patients?
　　a) Easy to measure small volumes accurately
　　b) Reduces the risk of aspiration
　　c) Provides controlled and precise delivery
　　d) All of the above

24. Which of the following is a disadvantage of using a medicine cup for liquid medication administration in pediatric patients?
　　a) Difficult to measure small volumes accurately
　　b) Increases the risk of aspiration
　　c) Provides uncontrolled and imprecise delivery
　　d) All of the above

transparent
for easy
measuring

(mL, cc, tbs, tsp)

(oz - cc)

25. Which of the following is a type of special adapter that can be attached to an oral syringe to enable direct oral medication administration in pediatric patients?
   a) Bottle adapter
   b) Dropper
   c) Spacer
   d) Dosage spoon

26. Which of the following is a type of delivery device specifically designed for administering liquid medication to infants and young children?
   a) Baby bottle nipple
   b) Pacifier medicine dispenser
   c) Sippy cup
   d) All of the above

27. Which of the following is a type of specialized device used for administering liquid medication to pediatric patients with oral motor difficulties?
   a) Enteral feeding tube
   b) Oral syringe with extension tube
   c) G-tube
   d) Nasogastric tube

28. Which of the following physiological changes in the elderly population can affect medication absorption?
  a) Decreased renal function
  b) Decreased gastric acid secretion
  c) Decreased hepatic enzyme activity
  d) All of the above

29. Which of the following is a common age-related change in the elderly population that can affect medication distribution?
  a) Increased body water content
  b) Decreased lean body mass
  c) Decreased body fat percentage
  d) All of the above

30. The elderly population is at an increased risk of adverse drug reactions due to:
  a) Polypharmacy
  b) Age-related changes in drug metabolism
  c) Drug-drug interactions
  d) All of the above

31. Which of the following renal changes in the elderly population can affect medication elimination?
  a) Decreased glomerular filtration rate
  b) Decreased tubular secretion
  c) Decreased renal blood flow
  d) All of the above

32. Which of the following physiological changes in the elderly population can affect medication absorption?
    a) Decreased renal function
    b) Decreased gastric acid secretion
    c) Decreased hepatic enzyme activity
    d) Decreased gastrointestinal motility

33. Which of the following is a common age-related change in the elderly population that can affect medication distribution?
    a) Increased body water content
    b) Decreased lean body mass
    c) Decreased body fat percentage
    d) Increased protein binding

34. The elderly population is at an increased risk of adverse drug reactions due to:
    a) Polypharmacy
    b) Age-related changes in drug metabolism
    c) Drug-drug interactions
    d) Impaired renal function

35. Which of the following renal changes in the elderly population can affect medication elimination?
    a) Decreased glomerular filtration rate
    b) Decreased tubular secretion
    c) Decreased renal blood flow
    d) Increased renal excretion of acidic drugs

36. Which of the following age-related changes in the elderly population can affect medication metabolism?
   a) Decreased hepatic blood flow
   b) Decreased hepatic enzyme activity
   c) Decreased protein binding
   d) Increased bioavailability of oral drugs

37. Which of the following is a potential consequence of polypharmacy in the elderly population?
   a) Increased risk of medication errors
   b) Increased risk of adverse drug reactions
   c) Increased healthcare costs
   d) Decreased medication adherence

38. Which of the following is an important consideration when calculating medication dosages for the elderly population?
   a) Adjust dosages based on renal function
   b) Consider potential drug interactions
   c) Start with lower doses and titrate slowly
   d) Take into account body weight changes

39. Which of the following is a commonly used tool to assess cognitive function in the elderly population?
   a) Mini-Mental State Examination (MMSE)
   b) Montreal Cognitive Assessment (MoCA)
   c) Clock Drawing Test
   d) Geriatric Depression Scale

40. Available: 180 mL of Isocal formula. Calculate the volume of water to add to make the ordered strength

Electronic Medical Record   Provider Orders ☒

Name	C. Patient	**Age** 49	**Gender** M	**DOB** 04-18-xx
MR #	49456	**Allergies**	NKDA	**Room** 148
Provider	M. Physician, MD		**Date** 04-09-xx	← →

▼ **Order**

Isocal formula 1/3 strength give 250 mL bolus feeding q.4h

41. Available: 180 mL of Jevity 1.2 Cal. Calculate the volume of water to add to make the ordered strength

Electronic Medical Record   Provider Orders ☒

Name	C. Patient	**Age** 49	**Gender** M	**DOB** 04-18-xx
MR #	49456	**Allergies**	NKDA	**Room** 148
Provider	M. Physician, MD		**Date** 04-09-xx	← →

▼ **Order**

Jevity 1.2 Cal formula 2/3 strength administer 300 mL gravity feeding q.6h.

42. Available: Nepro formula in 240 mL cans. Calculate the volume of water to add to make the ordered strength.

Electronic Medical Record — **Provider Orders**

Name	C. Patient	Age 49	Gender M	DOB 04-18-xx
MR #	49456	Allergies	NKDA	Room 148
Provider	M. Physician, MD		Date 04-09-xx	

Order

Nepro formula 3/4 strength via PEG tube per feeding pump start at 30 mL/hr.

43. Available: Jevity formula in 240 mL cans. Calculate the volume of water to add to make the desired strength.

Electronic Medical Record — **Provider Orders**

Name	C. Patient	Age 49	Gender M	DOB 04-18-xx
MR #	49456	Allergies	NKDA	Room 148
Provider	M. Physician, MD		Date 04-09-xx	

Order

Jevity formula 1/4 strength via PEG tube per feeding pump at 60 mL/hr.

Answers

ANSWERS

1. Safety in Medication Administration

1. C	21. A
2. B	22. A,B,D
3. A	23. A,C,D
4. B	24. B,C,D
5. D	25. A,B,C
6. A	26. A,B,C
7. B	27. A,C
8. C	28. A,C,D
9. B	29. A,C,D
10. B	30. B,C,D
11. E	31. B,C,D
12. C	32. A,B,D
13. B	33. A,D
14. D	34. A,B
15. A	35. A,B,D
16. A	36. A
17. D	37. B
18. B	38. C
19. A	39. C
20. A,B,D	40. C

2. The Drug Label

1. c
2. d
3. a
4. c
5. a,c
6. a,b,c
7. d
8. b
9. b
10. a,b,c
11. a,b,c
12. d
13. a,b
14. a,d
15. a
16. b
17. d
18. b
19. b
20. a
21. b
22. b
23. d
24. a,c,d
25. b,c
26. b
27. a
28. b,c
29. a,b

30. a
31. a,b
32. a,b,c
33. a
34. c
35. a

36. Generic and Brand;
Dosage form: liquid dosage form for oral use;
Dosage strength: 250 mg/5 mL;
Route(s) of administration: oral

37. Generic;
Dosage form: sterile liquid preparation;
Dosage strength: 2mg/mL;
Route(s) of administration: IM use or IV use

38. Generic and Brand;
Dosage form: solid oral preparation (tablet);
Dosage strength: 10 mg per tablet;
Route(s) of administration: oral

39. Generic;
Dosage form: solid oral preparation (tablet);
Dosage strength: 200 mg per tablet;
Route(s) of administration: oral

40. Generic; Dosage form: solid oral preparation (tablet);
Dosage strength: 20 mg per tablet;
Route(s) of administration: oral

41. Generic and Brand;
Dosage form: sterile liquid preparation;
Dosage strength: 80mg/20 mg per mL
Route(s) of administration: oral

42. Generic and Brand;
Dosage form: solid oral preparation (tablet);
Dosage strength: 2mg/240mg per tablet;
Route(s) of administration: oral

43. Generic and Brand;
Dosage form: solid oral preparation (tablet);
Dosage strength: 10 mg per tablet;
Route(s) of administration: oral

44. Generic and Brand;
Dosage form: solid oral preparation (tablet);
Dosage strength: 5 mg per tablet;
Route(s) of administration: oral

45. Generic and Brand;
Dosage form: solid oral preparation (tablet);
Dosage strength: 25 mg per tablet;
Route(s) of administration: oral

46. Generic and Brand;
Dosage form: sterile liquid preparation;
Dosage strength: 1mg/10mL;
Route(s) of administration: IV use

47. Generic and Brand;
Dosage form: sterile liquid preparation;
Dosage strength: 5mcg/mL;
Route(s) of administration: IV use

3. Systems of Measurement

1. 2500 grams.
2. 0.35 liters.
3. 3750 milliliters.
4. 0.5 milligrams.
5. 800 milligrams.
6. 150 millimeters.
7. 1 kilogram.
8. 25000 micrograms.
9. 500 milliliters.
10. 4.5 centimeters.
11. 1.5 milligrams.
12. 750 milliliters.
13. 2.5 kilograms.
14. 3500 milliliters.
15. 400 micrograms.
16. 5000 grams.
17. 0.8 liters.
18. 4500 milliliters.
19. 300 milligrams.
20. 600 millimeters.

21. a
22. b
23. c
24. a
25. d
26. c
27. a
28. c
29. c
30. b
31. b
32. a

4. Linear Ratio and Proportion

1. a
2. a
3. b
4. d
5. b
6. c
7. b
8. c
9. b
10. c
11. a
12. a
13. a
14. a
15. a
16. a
17. b
18. b
19. b
20. b

21. 2.5 mg : 1 tablet
22. 125 mg : 5 mL
23. 1.25 mg : 1 mL
24. 10 mg : 1 tablet
25. 1 mg   : 10 mL
26. 4.5 mL
27. 3 tsp
28. 2 tablets
29. 0.75 mL
30. 600 mg

5. Fractional Ratio and Proportion

1. $\dfrac{1.25 \text{ mg}}{1 \text{ mL}}$

2. $\dfrac{10 \text{ mg}}{1 \text{ tablet}}$

3. $\dfrac{1 \text{ mg}}{10 \text{ mL}}$ or $\dfrac{0.1 \text{ mg}}{1 \text{ mL}}$

4. $\dfrac{20 \text{ mg}}{5 \text{ mL}}$ or $\dfrac{4 \text{ mg}}{1 \text{ mL}}$

5. $\dfrac{2.5 \text{ mg}}{1 \text{ tablet}}$

6. $\dfrac{125 \text{ mg}}{5 \text{ mL}}$ or $\dfrac{25 \text{ mg}}{1 \text{ mL}}$

7. $\dfrac{250 \text{ mg}}{1 \text{ tablet}}$

8. $\dfrac{0.1 \text{ mg}}{1 \text{ mL}}$

9. $\dfrac{125 \text{ mg}}{1 \text{ tablet}}$

10. B. $\dfrac{5 \text{ mg}}{1 \text{ drop}} = \dfrac{20 \text{ mg}}{x \text{ drop}}$ **x** = 4 drop

11. A. $\dfrac{30 \text{ mg}}{\text{tablet}} = \dfrac{x \text{ mg}}{0.5 \text{ tablet}}$ $x = 15$ mg

12. B. $\dfrac{600 \text{ gram}}{1 \text{ mL}} = \dfrac{300 \text{ gram}}{x \text{ mL}}$ $x = 0.5$ mL

13. A. $\dfrac{3 \text{ mg}}{1 \text{ dose}} = \dfrac{x \text{ mg}}{4 \text{ dose}}$ $x = 12$ mgL

14. $\dfrac{0.50 \text{ g}}{1 \text{ tablet}} = \dfrac{0.250 \text{ g}}{x \text{ tablet}}$ $x = 0.5$ tablet

15. $\dfrac{0.50 \text{ g}}{1 \text{ tablet}} = \dfrac{2 \text{ g}}{x \text{ tablet}}$ $x = 4$ tablet

16. 500 mg
17. 0.5 mL
18. 3 mL
19. 3 tablets
20. 4 tablets/day
21. 2 tablets
22. 20 ml = 4 tsp

6. Dimensional Analysis

1. $\dfrac{5 \text{ mg}}{1 \text{ tablet}}$ or $\dfrac{1 \text{ tablet}}{5 \text{ mg}}$

2. $\dfrac{2 \text{ mg}}{1 \text{ mL}}$

3. $\dfrac{250 \text{ mg}}{5 \text{ mL}}$ or $\dfrac{50 \text{ mg}}{1 \text{ mL}}$

4. $\dfrac{324 \text{ mg}}{1 \text{ tablet}}$ or $\dfrac{1 \text{ tablet}}{324 \text{ mg}}$

5. $\dfrac{20 \text{ mg}}{5 \text{ mL}}$ or $\dfrac{4 \text{ mg}}{1 \text{ mL}}$

6. $\dfrac{125 \text{ mg}}{1 \text{ tablet}}$ or $\dfrac{1 \text{ tablet}}{125 \text{ mg}}$

7. 1000 mg
8. 0.6 mL
9. 3 tablets
10. 6 tablets
11. 2 tablets

12. $\dfrac{0.125 \text{ mg}}{1} \times \dfrac{1 \text{ pill}}{0.05 \text{ mg}} = x \text{ pill}$

$x = 2.5$ pills

13. 7.5 tablets
14. 1.5 mL
15. 3 capsules
16. 3 tsp
17. 5 tablets
18. 0.5 oz
19. 2 tablets
20. 4 tablets each day

7. Formula Method

1. Dosage strength = $\dfrac{125\ mg}{}$
H = 125 mg1 tablet
Q = 1 tablet

2. Dosage strength = $\dfrac{5\ mg}{1\ tablet}$

  H = 5 mg
  Q = 1 tablet

3. Dosage strength = $\dfrac{250\ mg}{5\ mL}$

  H = 250 mg
  Q = 5 mL

4. Dosage strength = $\dfrac{3.125\ mg}{1\ tablet}$

  H = 3.125 mg
  Q = 1 tablet

5. Dosage strength = $\dfrac{5\ mg}{1\ tablet}$

  H = 5 mg
  Q = 1 tablet

6. Dosage strength = $\dfrac{250\ mg}{1\ tablet}$

  H = 250 mg
  Q = 1 tablet

7. $\dfrac{50 \text{ mg}}{25 \text{ mg}}$ x 1 tablet = x tablet   x = 2 tablets

8. $\dfrac{750}{125}$ x 5 mL = x mL   x = 30 mL

9. $\dfrac{200 \text{ mg}}{25 \text{ mg}}$ x 5 mL = x mL   x = 40 mL

10. 15 mL = 0.5 oz
11. 2 tsp
12. 0.5 mL
13. 2 tablets
14. 600 mg
15. 2 tablets
16. 3 tablets
17. 3 tablets
18. 3 tablets
19. 5 tablets
20. 2 tablets

8. Calculating Oral Medication Doses

1. One-half tablet
2. 2 mL
3. 20 mL
4. 2.5 mL
5. 7.5 mL
6. c,d,e
7. b,c
8. d,e
9. 6 capsules
10. 15 mL= 3 teaspoons
11. d) 4 tablets
12. b) 2 tablets
13. c) 2.5 vials
14. b) 1,2 mg
15. b) 2 tablets
16. a) 5 mg
17. b) 0.5 mL
18. b) 200 mg
19. b) 2 vials
20. b) 3.5 mg

9. Syringes and Needles

1. B
2. A
3. B
4. D
5. C
6. A
7. C
8. A
9. C
10. D
11. B
12. D
13. A
14. D

15.
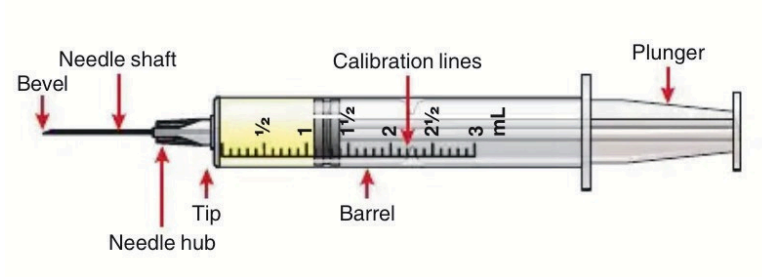
A = Needle hub
B = Tip
C = Needle shaft
D = Bevel
E = Calibration lines
F = Barrel
G = Plunger

10. Calculating Parenteral Medication Dosages

1. 2 mL	20. A
2. 1.5 mL	21. A
3. 4 mL	22. A
4. 0.15 mL	23. A
5. 1.5 mL	24. B
6. C	25. A
7. B	26. B
8. C	27. A
9. B	28. B
10. B	29. C
11. A	30. B
12. D	31. 30 mg
13. B	32. 3 mL
14. B	33. 0.5 mL/h
15. B	34. 35 mg
16. A	35. 3 mL
17. B	
18. A	
19. A	

11. Administration of Insulin

1. D	31. A
2. A	32. C
3. D	33. A
4. A	34. B
5. B	35. C
6. C	36. A
7. B	
8. C	
9. A	
10. B	
11. D	
12. C	
13. C	
14. D	
15. D	
16. A	
17. A	
18. A	
19. D	
20. A	
21. D	
22. A	
23. C	
24. C	
25. B	
26. A	
27. D	
28. D	
29. C	
30. D	

37.
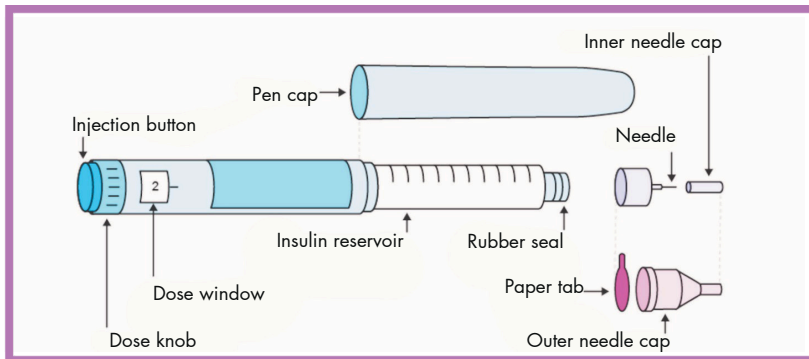
A = Injection button
B = Dose knob
C = Dose knob
D = Insulin reservoir
E = Pen cap

F = Rubber seal
G = Needle
H = Inner needle cap
I = Paper tab
J = Outer needle cap

38.

BRAND NAME	INSULIN TYPE
Humulin 70/30	70% Intermediate-acting/30% short-acting
Novolin 70/30	
Humalog Mix 75/25	
Humalog Mix 50/50	75% Intermediate-acting/25% rapid-acting
Novolog Mix 70/30	50% Intermediate-acting/50% rapid-acting
	70% Intermediate-acting/30% rapid-acting

A1 = Humulin 70/30
A2 = Novolin 70/30
B = Humalog Mix 75/25
C = Humalog Mix 50/50
D = Novolog Mix 70/30

12. Preparing Powdered Parenteral Medications

1. C
2. C
3. C
4. B
5. B
6. C
7. C
8. B
9. B
10. A
11. A
12. D
13. A
14. B
15. C
16. A
17. C
18. C
19. D
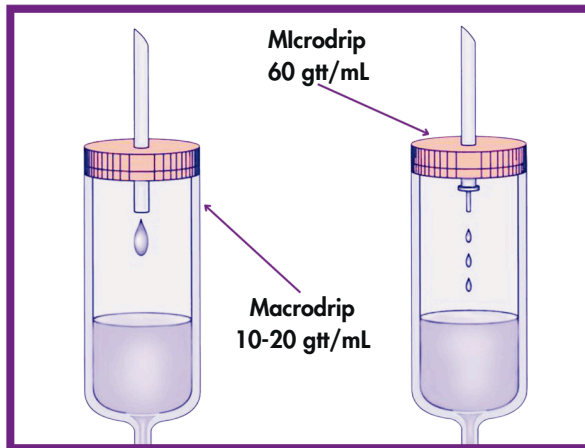20. C
21. B
22. B
23. A
24. B
25.
Amount of diluent: 3 mL;
Dosage strength: 1,000,000 units/mL;
Administer: 0.4 mL

13. Therapy and Administration of Intravenous Medications

1. 150 mL/hr
2. 100 mL/h
3. 25 gtt/min
4. 42 gtt/min
5. 125 mL/hr
6. 83 mL/hr
7. 42 gtt/min
8. 42 gtt/min
9. 83 mL/hr
10. 10 gtt/min
11. A
12. B
13. B
14. A
15. B
16. C
17. B
18. C
19. B
20. C
21. B
22. B

23.

A = MIcrodrip 60 gtt/mL

B = Macrodrip 10-20 gtt/mL

24.

A = IV solution name
B = Volume in IV bag
C = Zero number
D = Line markings
E = Manufacturer's
name
F = Expiration date

14. Fluid Intake and Output Management

1. 240mL
2. 2.5 mL
3. 30 mL
4. 120 mL
5. 15 mL
6. 12.5 mL
7. 720 mL
8. 22.5 mL
9. 22.2 mL
10. 355 mL
11. 13 mL
12. 148 mL
13. 37mL
14. 296 mL
15. 118 mL
16. 31 mL
17. 56 mL
18. 240 mL
19. 2.5 mL
20. 30 mL
21. 120 mL
22. 15 mL
23. 12.5 mL
24. 720 mL
25. 22.5 mL
26. 22 mL
27. 360 mL
28. 192 mL
29. 49 mL
30. 480 mL

31.

Name C. Patient   MR 49231   Date 10-2-xx

Intake and Output Worksheet

Shift	Oral	Other	Urine	Emesis	Drainage
7-3			280 360		
Total (mL)			640		

32.

Name C. Patient   MR 49231   Date 10-2-xx

Intake and Output Worksheet

Shift	Oral	Other	Urine	Emesis	Drainage
7-3			225 355	320	
Total (mL)			640		

33.

Name C. Patient   MR 49231   Date 10-2-xx

Intake and Output Worksheet

Shift	Oral	Other	Urine	Emesis	Drainage
	200 140 120 340 180		225 350		
Total (mL)			640		

34.

Electronic Medical Record　　　**Provider Orders** ✖

Name	C. Patient	Age	49	Gender	M	DOB	
MR #	49456	Allergies	NKDA			Room	312
Provider	M. Physician, MD			Date	04-09-xx		

Intake				Output	
Oral	IV	IVPB	Blood	Urine	Wound
495	400			825	35

35.

Electronic Medical Record　　　**Provider Orders** ✖

Name	C. Patient	Age	49	Gender	M	DOB	
MR #	49456	Allergies	NKDA			Room	312
Provider	M. Physician, MD			Date	04-09-xx		

Intake				Output	
Oral	IV	IVPB	Blood	Urine	UA Catheter
1150					725

36. 200 mL
37. 2 cups
38. 24 ounces 709 mL.

15. Dosage for Pediatric and Elderly Population

1. a
2. c
3. c
4. b
5. d
6. d
7. a
8. d
9. b
10. c
11. b
12. b
13. c
14. b
15. c
16. d
17. a
18. c
19. b
20. b
21. a
22. d
23. d
24. d
25. a
26. d
27. b
28. d
29. b
30. d

31. d
32. a
33. b
34. a
35. a
36. b
37. b
38. a
39. a
40. 360 mL
41. 90 mL
42. 80 mL
43. 720 mL
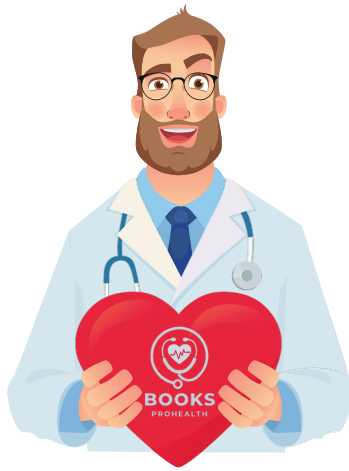
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