

WORK SHEET



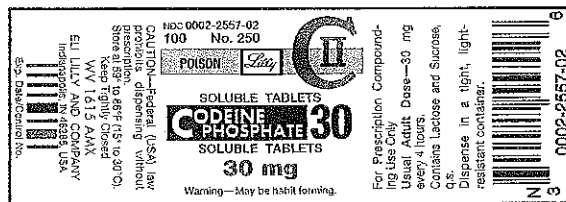
Directions: Calculate the following drug doses by using the dimensional analysis method. Show your work and check your answers.

1. Your patient with diabetes receives glipizide 10 mg po every morning. The drug is supplied in 5-mg scored tablets. How many tablets will you administer? _____

2. Mr. Theson receives Vistaril 60 mg po q6 h for relief of nausea after his acoustic neuroma revision. Vistaril oral suspension, 25 mg/5 mL, is supplied. How many milliliters will the nurse administer? _____

3. A patient who has undergone a lumbar laminectomy receives Demerol 0.025 g po q4 h prn for relief of pain. Demerol 50-mg tablets are available. How many tablets will the nurse administer? _____


4. Mrs. Fare receives codeine 30 mg po q3 h prn for pain relief after knee replacement surgery. How many tablets will you administer? _____



5. Your patient receives Keflex 0.5 g po four times a day. You have Keflex 250-mg capsules available. How many capsules will you administer? _____

NDC 0777-0869-02
100 PULVULES® No. 402

KEFLEX®
CEPHALEXIN
CAPSULES, USP
250 mg



Usual Adult Dose—One PULVULE every 6 hours. For more severe infections, dose may be increased, not to exceed 4 g a day. Each PULVULE contains Cephalixin Monohydrate equivalent to 250 mg Cephalixin. Dispense in a tight container.

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CAUTION—Federal (U.S.A.) law prohibits dispensing without prescription. Keep tightly closed. Store at Controlled Room Temperature 59° to 86°F (15° to 30°C). WV 3473 DPX.

Manufactured by
DISTA PRODUCTS CO.
a Division of Pharmacia
Caroline Puerto Rico 00950
a Subsidiary of Eli Lilly and Company
Indianapolis, IN, U.S.A.
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6. Your patient may receive Dilaudid 3 mg IM q3 h for relief of pain caused by a total hip replacement. Dilaudid is supplied in 1-mL ampules containing 4 mg. How many milliliters will you administer? _____

7. Johnny receives Lanoxin 40 mcg po q12 h for treatment of cardiac dysrhythmias. Lanoxin, 0.05 mg/mL, is available. How many milliliters will the nurse administer? _____

60 mL NDC 0173-0264-27

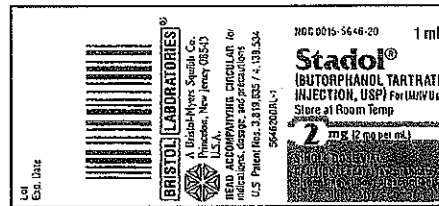
LANOXIN®
(DIGOXIN)
ELIXIR
PEDIATRIC

Each mL contains
50 µg (0.05 mg)
PLEASANTLY FLAVORED

Alcohol: 10%, Methylparaben 0.1% (added as a preservative)
For indications, dosage, precautions, etc., see accompanying package insert.
Store at 15° to 25°C (59° to 77°F) and protect from light.
CAUTION: Federal law prohibits dispensing without prescription.

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8. The physician prescribes Stadol 1 mg IV q4 h for a patient with a below-the-knee amputation. Stadol, 2 mg/mL, is available. How many milliliters will the nurse administer? _____



9. The physician orders heparin 2500 units subcutaneous q12 h for your patient with a jejunostomy. You have heparin, 5000 units/mL, available. How many milliliters will you administer? _____

10. The physician orders Gantrisin 2 g po stat. Gantrisin is supplied in 0.5-g tablets. How many tablets will the nurse administer? _____



11. A patient with an infection has an order for Timentin 3.1 g q6 h IVPB. The Timentin is dissolved in 100 mL of D₅W and is to be infused over 1 hour. The tubing drop factor is 20 gtt/mL. At what rate, in drops per minute, should the IVPB be programmed? _____

12. A patient with anuria has an order for 500 mL of 0.9% NS over 2 hours. The tubing drop factor is 10 gtt/mL. At what rate, in drops per minute, should the IV pump be programmed? _____
13. A patient who takes Coumadin at home is admitted to the hospital before surgery to receive a regulated infusion of heparin. The heparin is ordered for 1400 units/h. The heparin bag concentration is heparin, 25,000 units in 250 mL of D₅W. At what rate, in milliliters per hour, should the IV pump be programmed? _____
14. A patient with hyperglycemia has an order for regular insulin IV at a rate of 8 units/h. The concentration is insulin 50 units in 100 mL of 0.9% NS. At what rate, in milliliters per hour, will the IV pump be programmed? _____
15. Using the heparin protocol example on p. 177, calculate the heparin IV bolus and infusion rate for a patient weighing 132 lb. _____
16. The physician orders dobutamine at 12 mcg/kg/min for a patient weighing 75 kg. The concentration is dobutamine 1 g in 250 mL of D₅W. At what rate, in milliliters per hour, will the IV pump be programmed? _____
17. Mr. Perez is having chest pain and has an order for nitroglycerin at 10 mcg/min. The concentration is nitroglycerin 100 mg in 500 mL of D₅W. At what rate, in milliliters per hour, will the IV pump be programmed? _____

18. The physician orders amiodarone at 0.5 mg/min. The concentration of amiodarone is 900 mg in 500 mL of D₅W. At what rate, in milliliters per hour, will the IV pump be set? _____
19. a. Calculate the acetaminophen dose range for a child who weighs 14.5 kg. The recommended dose for acetaminophen is 10 to 15 mg/kg/dose q4-6 h. _____
- b. What milliliter range is needed to deliver the calculated dose range? Acetaminophen is available as Tylenol elixir 160 mg/5 mL. _____
20. The doctor orders Lanoxin elixir 20 mcg po now. You have Lanoxin 0.1 mg/mL. What is the amount to be given? _____
21. Amoxil 500 mg po q6 h is ordered for a child weighing 50 kg. The recommended high dosage of Amoxil is 80 to 100 mg/kg/24 h q12.
- a. What is the single dose range for this child? _____
- b. Is the ordered dose safe to administer? Prove your response. _____

22. Phenobarbital elixir comes in 4 mg/mL. How many milliliters are needed to deliver 7.5 mg? _____

Answers on pp. 484-486.



Refer to *Methods of Calculating Dosages: Dimensional Analysis* on the enclosed CD for additional help and practice problems.