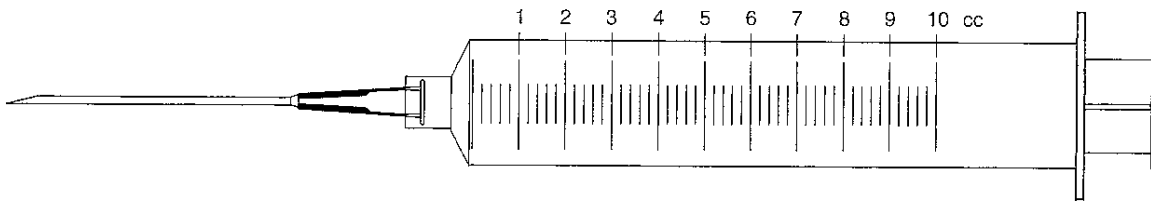


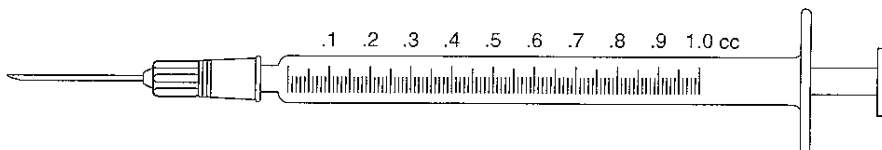
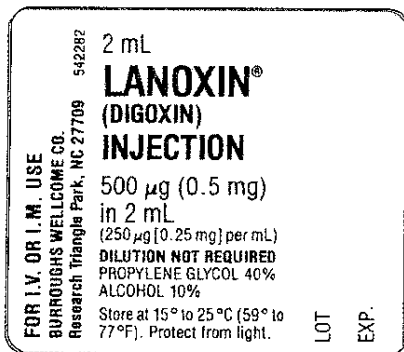
# WORK SHEET

**Directions:** The medication order is listed at the beginning of each problem. Calculate the parenteral dosages. Show your work. Shade the syringe when provided to indicate the correct dosage.

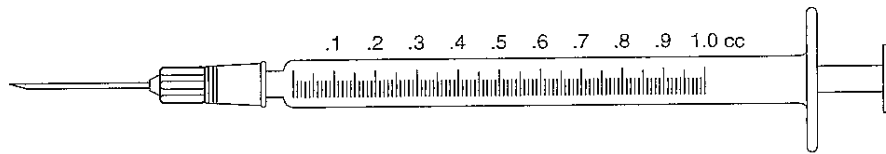
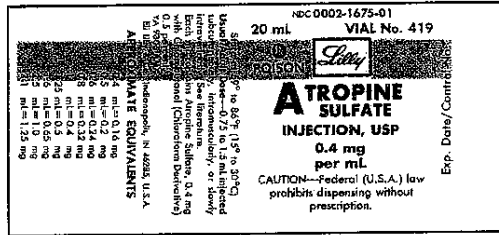
1. The physician orders gentamicin 30 mg IM q8 h for your patient with a central line infection. Gentamicin 10 mg per mL is available. How many milliliters will you administer? \_\_\_\_\_.



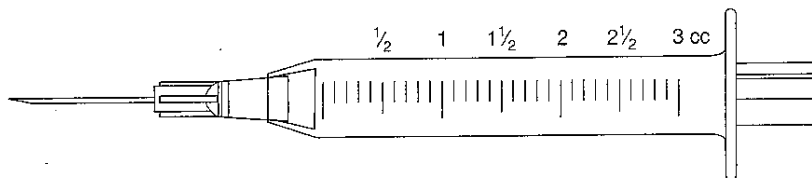
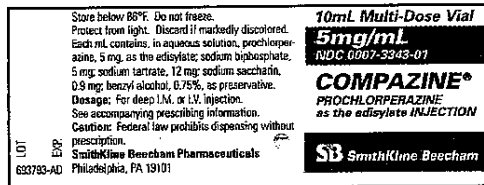
2. Your patient with an atrial valve repair has Lanoxin 110 mcg IV q12 h ordered. How many milliliters will you prepare? \_\_\_\_\_.



3. Ordered atropine gr  $\frac{1}{200}$  IM at 6:15 AM. How many milliliters will the nurse administer? \_\_\_\_\_ .



4. Your patient who has undergone pacemaker placement complains of nausea and has Compazine 10 mg IM q6 h ordered. How many milliliters will you administer? \_\_\_\_\_ .



5. Ordered meperidine 45 mg IM q4 h. How many milliliters will the nurse administer? \_\_\_\_\_.

25 DOSETTE® AMPULS Each contains 1 mL  
NDC 0841-1140-35

**MEPERIDINE**  
HCl INJECTION, USP

**75 mg/mL**

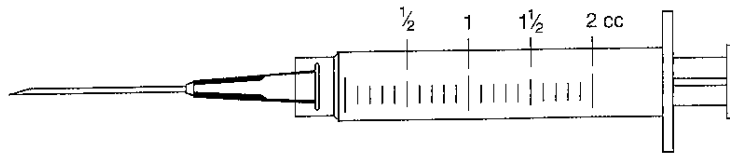
FOR INTRAMUSCULAR, SUBCUTANEOUS OR SLOW INTRAVENOUS USE

Warning: May be habit forming.  
Each mL contains meperidine hydrochloride 75 mg in Water for Injection, pH 5.5-6.5, sodium hydroxide and/or hydrochloric acid added, if needed, for pH adjustment. Sealed under nitrogen.

USUAL DOSE: See package insert.

DO NOT USE IF PRECIPITATED.

Store at controlled room temperature (20°-25°C, 68°-77°F).  
Caution: Federal law prohibits dispensing without prescription.  
To open ampuls, ignore color line; break at constriction.  
Product Code: 1140-35 B-51140d



6. The physician orders piperacillin 3 g IV q8 h for your patient with sepsis. You have piperacillin 1 g per 2.5 mL available. How many milliliters will you prepare? \_\_\_\_\_.
7. Ordered morphine 5 mg SQ q4 h. You have morphine gr  $\frac{1}{6}$  per mL available. How many milliliters will the nurse administer? \_\_\_\_\_.

LIGHT SENSITIVE: Keep covered in this box until ready to use.

To open - Cut seal along dotted line.

25 DOSETTE® VIALS—Each contains 1 mL

**MORPHINE**  
SULFATE INJECTION, USP  
**10 mg/ml**

FOR SUBCUTANEOUS, INTRAMUSCULAR OR SLOW INTRAVENOUS USE  
NOT FOR EPIDURAL OR INTRATHECAL USE

WARNING: May be habit forming

PROTECT FROM LIGHT

DO NOT USE IF PRECIPITATED

CAUTION: Federal law prohibits dispensing without prescription

dXB  
LO7

NDC 0841-0180-25

Each mL contains morphine sulfate 10 mg, sodium dihydrogen phosphate 10 mg, disodium hydrogen phosphate 2.5 mg, sodium tartrate dihydrate sulfuxylate 3 mg and phenol 2.5 mg in Water for Injection. Sulfuric acid used to adjust pH to 2.5-6.0. Sealed under nitrogen.

USUAL DOSE: See package insert for complete prescribing information.

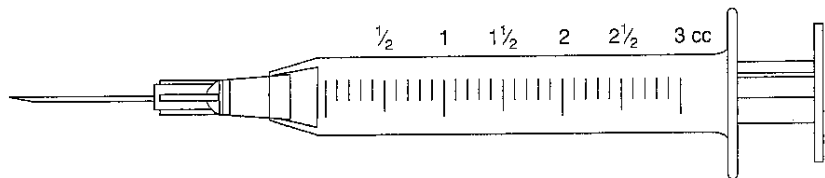
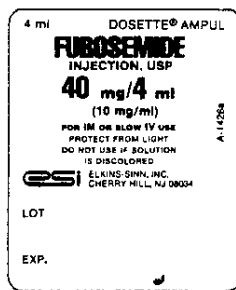
NOTE: Slight discoloration will not alter efficacy. Discard if markedly discolored.

Product Code: 0180-25 B-50160c

**ESI ELKINS-SINN, INC. Cherry Hill, NJ 08034**  
A subsidiary of E. H. Robbins Company

8. The physician orders vancomycin 1 g IV q12 h for your patient with a right-hand amputation. After reconstitution of the medication, you have vancomycin 500 mg per 6 mL. How many milliliters will you prepare? \_\_\_\_\_.

9. Your patient with congestive heart failure requires furosemide 30 mg IM stat. How many milliliters will you administer? \_\_\_\_\_.



10. Your postoperative patient has Toradol 15 mg IM q6 h for 5 days ordered. You have 30 mg/mL prefilled syringes. How many milliliters will you administer? \_\_\_\_\_.

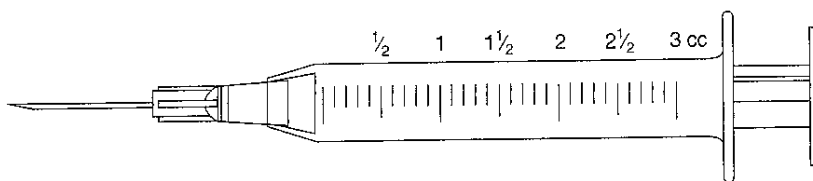
11. Ordered D<sub>5</sub>W 1000 mL plus sodium bicarbonate (NaHCO<sub>3</sub>) 25.8 mEq at 12 mL per h IV. NaHCO<sub>3</sub> is supplied in a 50-mL ampule containing 44.6 mEq. How many milliliters of NaHCO<sub>3</sub> will be added to the 1000 mL of D<sub>5</sub>W? \_\_\_\_\_.

12. Your patient with asthma requires aminophylline 100 mg IV q6 h. How many milliliters will you prepare? \_\_\_\_\_ .



13. Ordered amphotericin B 350 mg IV qd. You have a 100-mg/20-mL vial. How many milliliters will you prepare? \_\_\_\_\_ .

14. Ordered Gantrisin gr xv IV stat. You have a 5-mL ampule containing 2 g. How many milliliters will you prepare? \_\_\_\_\_ .

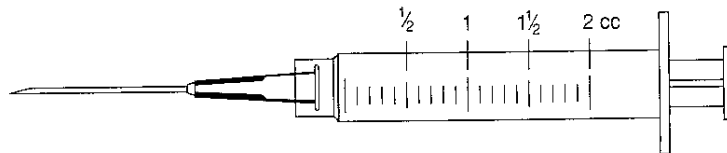


15. The physician orders Solu-Cortef 0.05 g IM q6 h for your patient with scleroderma. How many milliliters will you administer? \_\_\_\_\_.

Single-Dose Vial For IV or IM use  
 Contains Butyl Alcohol as a Preservative  
 See package insert for complete product information.  
 Per 2 mL (when mixed):  
 hydrocortisone sodium succinate equiv:  
 12 hydrocortisone, 250 mg. Protect  
 solution from light. Discard after 3 days.  
 514 078 285 Reconstituted  
 The Upjohn Company  
 Kalamazoo, MI 49001, USA

2 mL Act-O-Vial® NDC 0009-0909-08

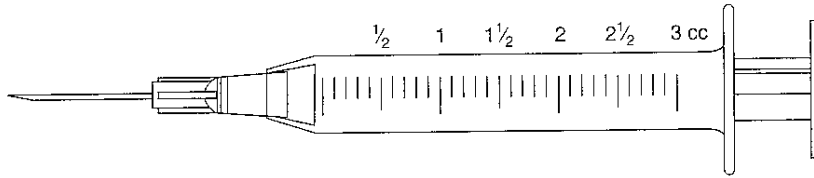
**Solu-Cortef**® Sterile Powder  
 hydrocortisone sodium succinate  
 for injection, USP  
**250 mg\***



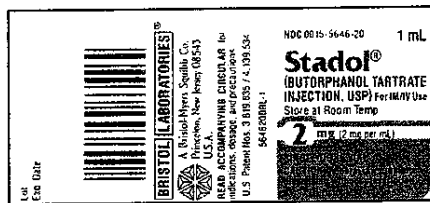
16. Your patient with epilepsy requires phenobarbital 0.3 g IM tid. How many milliliters will you administer? \_\_\_\_\_.

See accompanying literature for  
 complete prescribing information.  
 Caffeine solution for injection,  
 100 mg/mL, 10 mL, 30 mL, 60 mL,  
 120 mL, 180 mL, 240 mL, 300 mL,  
 360 mL, 420 mL, 480 mL, 540 mL,  
 600 mL, 660 mL, 720 mL, 780 mL,  
 840 mL, 900 mL, 960 mL, 1020 mL,  
 1080 mL, 1140 mL, 1200 mL,  
 1260 mL, 1320 mL, 1380 mL,  
 1440 mL, 1500 mL, 1560 mL,  
 1620 mL, 1680 mL, 1740 mL,  
 1800 mL, 1860 mL, 1920 mL,  
 1980 mL, 2040 mL, 2100 mL,  
 2160 mL, 2220 mL, 2280 mL,  
 2340 mL, 2400 mL, 2460 mL,  
 2520 mL, 2580 mL, 2640 mL,  
 2700 mL, 2760 mL, 2820 mL,  
 2880 mL, 2940 mL, 3000 mL,  
 3060 mL, 3120 mL, 3180 mL,  
 3240 mL, 3300 mL, 3360 mL,  
 3420 mL, 3480 mL, 3540 mL,  
 3600 mL, 3660 mL, 3720 mL,  
 3780 mL, 3840 mL, 3900 mL,  
 3960 mL, 4020 mL, 4080 mL,  
 4140 mL, 4200 mL, 4260 mL,  
 4320 mL, 4380 mL, 4440 mL,  
 4500 mL, 4560 mL, 4620 mL,  
 4680 mL, 4740 mL, 4800 mL,  
 4860 mL, 4920 mL, 4980 mL,  
 5040 mL, 5100 mL, 5160 mL,  
 5220 mL, 5280 mL, 5340 mL,  
 5400 mL, 5460 mL, 5520 mL,  
 5580 mL, 5640 mL, 5700 mL,  
 5760 mL, 5820 mL, 5880 mL,  
 5940 mL, 6000 mL, 6060 mL,  
 6120 mL, 6180 mL, 6240 mL,  
 6300 mL, 6360 mL, 6420 mL,  
 6480 mL, 6540 mL, 6600 mL,  
 6660 mL, 6720 mL, 6780 mL,  
 6840 mL, 6900 mL, 6960 mL,  
 7020 mL, 7080 mL, 7140 mL,  
 7200 mL, 7260 mL, 7320 mL,  
 7380 mL, 7440 mL, 7500 mL,  
 7560 mL, 7620 mL, 7680 mL,  
 7740 mL, 7800 mL, 7860 mL,  
 7920 mL, 7980 mL, 8040 mL,  
 8100 mL, 8160 mL, 8220 mL,  
 8280 mL, 8340 mL, 8400 mL,  
 8460 mL, 8520 mL, 8580 mL,  
 8640 mL, 8700 mL, 8760 mL,  
 8820 mL, 8880 mL, 8940 mL,  
 9000 mL, 9060 mL, 9120 mL,  
 9180 mL, 9240 mL, 9300 mL,  
 9360 mL, 9420 mL, 9480 mL,  
 9540 mL, 9600 mL, 9660 mL,  
 9720 mL, 9780 mL, 9840 mL,  
 9900 mL, 9960 mL, 10020 mL,  
 10080 mL, 10140 mL, 10200 mL,  
 10260 mL, 10320 mL, 10380 mL,  
 10440 mL, 10500 mL, 10560 mL,  
 10620 mL, 10680 mL, 10740 mL,  
 10800 mL, 10860 mL, 10920 mL,  
 10980 mL, 11040 mL, 11100 mL,  
 11160 mL, 11220 mL, 11280 mL,  
 11340 mL, 11400 mL, 11460 mL,  
 11520 mL, 11580 mL, 11640 mL,  
 11700 mL, 11760 mL, 11820 mL,  
 11880 mL, 11940 mL, 12000 mL,  
 12060 mL, 12120 mL, 12180 mL,  
 12240 mL, 12300 mL, 12360 mL,  
 12420 mL, 12480 mL, 12540 mL,  
 12600 mL, 12660 mL, 12720 mL,  
 12780 mL, 12840 mL, 12900 mL,  
 12960 mL, 13020 mL, 13080 mL,  
 13140 mL, 13200 mL, 13260 mL,  
 13320 mL, 13380 mL, 13440 mL,  
 13500 mL, 13560 mL, 13620 mL,  
 13680 mL, 13740 mL, 13800 mL,  
 13860 mL, 13920 mL, 13980 mL,  
 14040 mL, 14100 mL, 14160 mL,  
 14220 mL, 14280 mL, 14340 mL,  
 14400 mL, 14460 mL, 14520 mL,  
 14580 mL, 14640 mL, 14700 mL,  
 14760 mL, 14820 mL, 14880 mL,  
 14940 mL, 15000 mL, 15060 mL,  
 15120 mL, 15180 mL, 15240 mL,  
 15300 mL, 15360 mL, 15420 mL,  
 15480 mL, 15540 mL, 15600 mL,  
 15660 mL, 15720 mL, 15780 mL,  
 15840 mL, 15900 mL, 15960 mL,  
 16020 mL, 16080 mL, 16140 mL,  
 16200 mL, 16260 mL, 16320 mL,  
 16380 mL, 16440 mL, 16500 mL,  
 16560 mL, 16620 mL, 16680 mL,  
 16740 mL, 16800 mL, 16860 mL,  
 16920 mL, 16980 mL, 17040 mL,  
 17100 mL, 17160 mL, 17220 mL,  
 17280 mL, 17340 mL, 17400 mL,  
 17460 mL, 17520 mL, 17580 mL,  
 17640 mL, 17700 mL, 17760 mL,  
 17820 mL, 17880 mL, 17940 mL,  
 18000 mL, 18060 mL, 18120 mL,  
 18180 mL, 18240 mL, 18300 mL,  
 18360 mL, 18420 mL, 18480 mL,  
 18540 mL, 18600 mL, 18660 mL,  
 18720 mL, 18780 mL, 18840 mL,  
 18900 mL, 18960 mL, 19020 mL,  
 19080 mL, 19140 mL, 19200 mL,  
 19260 mL, 19320 mL, 19380 mL,  
 19440 mL, 19500 mL, 19560 mL,  
 19620 mL, 19680 mL, 19740 mL,  
 19800 mL, 19860 mL, 19920 mL,  
 19980 mL, 20040 mL, 20100 mL,  
 20160 mL, 20220 mL, 20280 mL,  
 20340 mL, 20400 mL, 20460 mL,  
 20520 mL, 20580 mL, 20640 mL,  
 20700 mL, 20760 mL, 20820 mL,  
 20880 mL, 20940 mL, 21000 mL,  
 21060 mL, 21120 mL, 21180 mL,  
 21240 mL, 21300 mL, 21360 mL,  
 21420 mL, 21480 mL, 21540 mL,  
 21600 mL, 21660 mL, 21720 mL,  
 21780 mL, 21840 mL, 21900 mL,  
 21960 mL, 22020 mL, 22080 mL,  
 22140 mL, 22200 mL, 22260 mL,  
 22320 mL, 22380 mL, 22440 mL,  
 22500 mL, 22560 mL, 22620 mL,  
 22680 mL, 22740 mL, 22800 mL,  
 22860 mL, 22920 mL, 22980 mL,  
 23040 mL, 23100 mL, 23160 mL,  
 23220 mL, 23280 mL, 23340 mL,  
 23400 mL, 23460 mL, 23520 mL,  
 23580 mL, 23640 mL, 23700 mL,  
 23760 mL, 23820 mL, 23880 mL,  
 23940 mL, 24000 mL, 24060 mL,  
 24120 mL, 24180 mL, 24240 mL,  
 24300 mL, 24360 mL, 24420 mL,  
 24480 mL, 24540 mL, 24600 mL,  
 24660 mL, 24720 mL, 24780 mL,  
 24840 mL, 24900 mL, 24960 mL,  
 25020 mL, 25080 mL, 25140 mL,  
 25200 mL, 25260 mL, 25320 mL,  
 25380 mL, 25440 mL, 25500 mL,  
 25560 mL, 25620 mL, 25680 mL,  
 25740 mL, 25800 mL, 25860 mL,  
 25920 mL, 25980 mL, 26040 mL,  
 26100 mL, 26160 mL, 26220 mL,  
 26280 mL, 26340 mL, 26400 mL,  
 26460 mL, 26520 mL, 26580 mL,  
 26640 mL, 26700 mL, 26760 mL,  
 26820 mL, 26880 mL, 26940 mL,  
 27000 mL, 27060 mL, 27120 mL,  
 27180 mL, 27240 mL, 27300 mL,  
 27360 mL, 27420 mL, 27480 mL,  
 27540 mL, 27600 mL, 27660 mL,  
 27720 mL, 27780 mL, 27840 mL,  
 27900 mL, 27960 mL, 28020 mL,  
 28080 mL, 28140 mL, 28200 mL,  
 28260 mL, 28320 mL, 28380 mL,  
 28440 mL, 28500 mL, 28560 mL,  
 28620 mL, 28680 mL, 28740 mL,  
 28800 mL, 28860 mL, 28920 mL,  
 28980 mL, 29040 mL, 29100 mL,  
 29160 mL, 29220 mL, 29280 mL,  
 29340 mL, 29400 mL, 29460 mL,  
 29520 mL, 29580 mL, 29640 mL,  
 29700 mL, 29760 mL, 29820 mL,  
 29880 mL, 29940 mL, 30000 mL,  
 30060 mL, 30120 mL, 30180 mL,  
 30240 mL, 30300 mL, 30360 mL,  
 30420 mL, 30480 mL, 30540 mL,  
 30600 mL, 30660 mL, 30720 mL,  
 30780 mL, 30840 mL, 30900 mL,  
 30960 mL, 31020 mL, 31080 mL,  
 31140 mL, 31200 mL, 31260 mL,  
 31320 mL, 31380 mL, 31440 mL,  
 31500 mL, 31560 mL, 31620 mL,  
 31680 mL, 31740 mL, 31800 mL,  
 31860 mL, 31920 mL, 31980 mL,  
 32040 mL, 32100 mL, 32160 mL,  
 32220 mL, 32280 mL, 32340 mL,  
 32400 mL, 32460 mL, 32520 mL,  
 32580 mL, 32640 mL, 32700 mL,  
 32760 mL, 32820 mL, 32880 mL,  
 32940 mL, 33000 mL, 33060 mL,  
 33120 mL, 33180 mL, 33240 mL,  
 33300 mL, 33360 mL, 33420 mL,  
 33480 mL, 33540 mL, 33600 mL,  
 33660 mL, 33720 mL, 33780 mL,  
 33840 mL, 33900 mL, 33960 mL,  
 34020 mL, 34080 mL, 34140 mL,  
 34200 mL, 34260 mL, 34320 mL,  
 34380 mL, 34440 mL, 34500 mL,  
 34560 mL, 34620 mL, 34680 mL,  
 34740 mL, 34800 mL, 34860 mL,  
 34920 mL, 34980 mL, 35040 mL,  
 35100 mL, 35160 mL, 35220 mL,  
 35280 mL, 35340 mL, 35400 mL,  
 35460 mL, 35520 mL, 35580 mL,  
 35640 mL, 35700 mL, 35760 mL,  
 35820 mL, 35880 mL, 35940 mL,  
 36000 mL, 36060 mL, 36120 mL,  
 36180 mL, 36240 mL, 36300 mL,  
 36360 mL, 36420 mL, 36480 mL,  
 36540 mL, 36600 mL, 36660 mL,  
 36720 mL, 36780 mL, 36840 mL,  
 36900 mL, 36960 mL, 37020 mL,  
 37080 mL, 37140 mL, 37200 mL,  
 37260 mL, 37320 mL, 37380 mL,  
 37440 mL, 37500 mL, 37560 mL,  
 37620 mL, 37680 mL, 37740 mL,  
 37800 mL, 37860 mL, 37920 mL,  
 37980 mL, 38040 mL, 38100 mL,  
 38160 mL, 38220 mL, 38280 mL,  
 38340 mL, 38400 mL, 38460 mL,  
 38520 mL, 38580 mL, 38640 mL,  
 38700 mL, 38760 mL, 38820 mL,  
 38880 mL, 38940 mL, 39000 mL,  
 39060 mL, 39120 mL, 39180 mL,  
 39240 mL, 39300 mL, 39360 mL,  
 39420 mL, 39480 mL, 39540 mL,  
 39600 mL, 39660 mL, 39720 mL,  
 39780 mL, 39840 mL, 39900 mL,  
 39960 mL, 40020 mL, 40080 mL,  
 40140 mL, 40200 mL, 40260 mL,  
 40320 mL, 40380 mL, 40440 mL,  
 40500 mL, 40560 mL, 40620 mL,  
 40680 mL, 40740 mL, 40800 mL,  
 40860 mL, 40920 mL, 40980 mL,  
 41040 mL, 41100 mL, 41160 mL,  
 41220 mL, 41280 mL, 41340 mL,  
 41400 mL, 41460 mL, 41520 mL,  
 41580 mL, 41640 mL, 41700 mL,  
 41760 mL, 41820 mL, 41880 mL,  
 41940 mL, 42000 mL, 42060 mL,  
 42120 mL, 42180 mL, 42240 mL,  
 42300 mL, 42360 mL, 42420 mL,  
 42480 mL, 42540 mL, 42600 mL,  
 42660 mL, 42720 mL, 42780 mL,  
 42840 mL, 42900 mL, 42960 mL,  
 43020 mL, 43080 mL, 43140 mL,  
 43200 mL, 43260 mL, 43320 mL,  
 43380 mL, 43440 mL, 43500 mL,  
 43560 mL, 43620 mL, 43680 mL,  
 43740 mL, 43800 mL, 43860 mL,  
 43920 mL, 43980 mL, 44040 mL,  
 44100 mL, 44160 mL, 44220 mL,  
 44280 mL, 44340 mL, 44400 mL,  
 44460 mL, 44520 mL, 44580 mL,  
 44640 mL, 44700 mL, 44760 mL,  
 44820 mL, 44880 mL, 44940 mL,  
 45000 mL, 45060 mL, 45120 mL,  
 45180 mL, 45240 mL, 45300 mL,  
 45360 mL, 45420 mL, 45480 mL,  
 45540 mL, 45600 mL, 45660 mL,  
 45720 mL, 45780 mL, 45840 mL,  
 45900 mL, 45960 mL, 46020 mL,  
 46080 mL, 46140 mL, 46200 mL,  
 46260 mL, 46320 mL, 46380 mL,  
 46440 mL, 46500 mL, 46560 mL,  
 46620 mL, 46680 mL, 46740 mL,  
 46800 mL, 46860 mL, 46920 mL,  
 46980 mL, 47040 mL, 47100 mL,  
 47160 mL, 47220 mL, 47280 mL,  
 47340 mL, 47400 mL, 47460 mL,  
 47520 mL, 47580 mL, 47640 mL,  
 47700 mL, 47760 mL, 47820 mL,  
 47880 mL, 47940 mL, 48000 mL,  
 48060 mL, 48120 mL, 48180 mL,  
 48240 mL, 48300 mL, 48360 mL,  
 48420 mL, 48480 mL, 48540 mL,  
 48600 mL, 48660 mL, 48720 mL,  
 48780 mL, 48840 mL, 48900 mL,  
 48960 mL, 49020 mL, 49080 mL,  
 49140 mL, 49200 mL, 49260 mL,  
 49320 mL, 49380 mL, 49440 mL,  
 49500 mL, 49560 mL, 49620 mL,  
 49680 mL, 49740 mL, 49800 mL,  
 49860 mL, 49920 mL, 49980 mL,  
 50040 mL, 50100 mL, 50160 mL,  
 50220 mL, 50280 mL, 50340 mL,  
 50400 mL, 50460 mL, 50520 mL,  
 50580 mL, 50640 mL, 50700 mL,  
 50760 mL, 50820 mL, 50880 mL,  
 50940 mL, 51000 mL, 51060 mL,  
 51120 mL, 51180 mL, 51240 mL,  
 51300 mL, 51360 mL, 51420 mL,  
 51480 mL, 51540 mL, 51600 mL,  
 51660 mL, 51720 mL, 51780 mL,  
 51840 mL, 51900 mL, 51960 mL,  
 52020 mL, 52080 mL, 52140 mL,  
 52200 mL, 52260 mL, 52320 mL,  
 52380 mL, 52440 mL, 52500 mL,  
 52560 mL, 52620 mL, 52680 mL,  
 52740 mL, 52800 mL, 52860 mL,  
 52920 mL, 52980 mL, 53040 mL,  
 53100 mL, 53160 mL, 53220 mL,  
 53280 mL, 53340 mL, 53400 mL,  
 53460 mL, 53520 mL, 53580 mL,  
 53640 mL, 53700 mL, 53760 mL,  
 53820 mL, 53880 mL, 53940 mL,  
 54000 mL, 54060 mL, 54120 mL,  
 54180 mL, 54240 mL, 54300 mL,  
 54360 mL, 54420 mL, 54480 mL,  
 54540 mL, 54600 mL, 54660 mL,  
 54720 mL, 54780 mL, 54840 mL,  
 54900 mL, 54960 mL, 55020 mL,  
 55080 mL, 55140 mL, 55200 mL,  
 55260 mL, 55320 mL, 55380 mL,  
 55440 mL, 55500 mL, 55560 mL,  
 55620 mL, 55680 mL, 55740 mL,  
 55800 mL, 55860 mL, 55920 mL,  
 55980 mL, 56040 mL, 56100 mL,  
 56160 mL, 56220 mL, 56280 mL,  
 56340 mL, 56400 mL, 56460 mL,  
 56520 mL, 56580 mL, 56640 mL,  
 56700 mL, 56760 mL, 56820 mL,  
 56880 mL, 56940 mL, 57000 mL,  
 57060 mL, 57120 mL, 57180 mL,  
 57240 mL, 57300 mL, 57360 mL,  
 57420 mL, 57480 mL, 57540 mL,  
 57600 mL, 57660 mL, 57720 mL,  
 57780 mL, 57840 mL, 57900 mL,  
 57960 mL, 58020 mL, 58080 mL,  
 58140 mL, 58200 mL, 58260 mL,  
 58320 mL, 58380 mL, 58440 mL,  
 58500 mL, 58560 mL, 58620 mL,  
 58680 mL, 58740 mL, 58800 mL,  
 58860 mL, 58920 mL, 58980 mL,  
 59040 mL, 59100 mL, 59160 mL,  
 59220 mL, 59280 mL, 59340 mL,  
 59400 mL, 59460 mL, 59520 mL,  
 59580 mL, 59640 mL, 59700 mL,  
 59760 mL, 59820 mL, 59880 mL,  
 59940 mL, 60000 mL, 60060 mL,  
 60120 mL, 60180 mL, 60240 mL,  
 60300 mL, 60360 mL, 60420 mL,  
 60480 mL, 60540 mL, 60600 mL,  
 60660 mL, 60720 mL, 60780 mL,  
 60840 mL, 60900 mL, 60960 mL,  
 61020 mL, 61080 mL, 61140 mL,  
 61200 mL, 61260 mL, 61320 mL,  
 61380 mL, 61440 mL, 61500 mL,  
 61560 mL, 61620 mL, 61680 mL,  
 61740 mL, 61800 mL, 61860 mL,  
 61920 mL, 61980 mL, 62040 mL,  
 62100 mL, 62160 mL, 62220 mL,  
 62280 mL, 62340 mL, 62400 mL,  
 62460 mL, 62520 mL, 62580 mL,  
 62640 mL, 62700 mL, 62760 mL,  
 62820 mL, 62880 mL, 62940 mL,  
 63000 mL, 63060 mL, 63120 mL,  
 63180 mL, 63240 mL, 63300 mL,  
 63360 mL, 63420 mL, 63480 mL,  
 63540 mL, 63600 mL, 63660 mL,  
 63720 mL, 63780 mL, 63840 mL,  
 63900 mL, 63960 mL, 64020 mL,  
 64080 mL, 64140 mL, 64200 mL,  
 64260 mL, 64320 mL, 64380 mL,  
 64440 mL, 64500 mL, 64560 mL,  
 64620 mL, 64680 mL, 64740 mL,  
 64800 mL, 64860 mL, 64920 mL,  
 64980 mL, 65040 mL, 65100 mL,  
 65160 mL, 65220 mL, 65280 mL,  
 65340 mL, 65400 mL, 65460 mL,  
 65520 mL, 65580 mL, 65640 mL,  
 65700 mL, 65760 mL, 65820 mL,  
 65880 mL, 65940 mL, 66000 mL,  
 66060 mL, 66120 mL, 66180 mL,  
 66240 mL, 66300 mL, 66360 mL,  
 66420 mL, 66480 mL, 66540 mL,  
 66600 mL, 66660 mL, 66720 mL,  
 66780 mL, 66840 mL, 66900 mL,  
 66960 mL, 67020 mL, 67080 mL,  
 67140 mL, 67200 mL, 67260 mL,  
 67320 mL, 67380 mL, 67440 mL,  
 67500 mL, 67560 mL, 67620 mL,  
 67680 mL, 67740 mL, 67800 mL,  
 67860 mL, 67920 mL, 67980 mL,  
 68040 mL, 68100 mL, 68160 mL,  
 68220 mL, 68280 mL, 68340 mL,  
 68400 mL, 68460 mL, 68520 mL,  
 68580 mL, 68640 mL, 68700 mL,  
 68760 mL, 68820 mL, 68880 mL,  
 68940 mL, 69000 mL, 69060 mL,  
 69120 mL, 69180 mL, 69240 mL,  
 69300 mL, 69360 mL, 69420 mL,  
 69480 mL, 69540 mL, 69600 mL,  
 69660 mL, 69720 mL, 69780 mL,  
 69840 mL, 69900 mL, 69960 mL,  
 70020 mL, 70080 mL, 70140 mL,  
 70200 mL, 70260 mL, 70320 mL,  
 70380 mL, 70440 mL, 70500 mL,  
 70560 mL, 70620 mL, 70680 mL,  
 70740 mL, 70800 mL, 70860 mL,  
 70920 mL, 70980 mL, 71040 mL,  
 71100 mL, 71160 mL, 71220 mL,  
 71280 mL, 71340 mL, 71400 mL,  
 71460 mL, 71520 mL, 71580 mL,  
 71640 mL, 71700 mL, 71760 mL,  
 71820 mL, 71880 mL, 71940 mL,  
 72000 mL, 72060 mL, 72120 mL,  
 72180 mL, 72240 mL, 72300 mL,  
 72360 mL, 72420 mL, 72480 mL,  
 72540 mL, 72600 mL, 72660 mL,  
 72720 mL, 72780 mL, 72840 mL,  
 72900 mL, 72960 mL, 73020 mL,  
 73080 mL, 73140 mL, 73200 mL,  
 73260 mL, 73320 mL, 73380 mL,  
 73440 mL, 73500 mL, 73560 mL,  
 73620 mL, 73680 mL, 73740 mL,  
 73800 mL, 73860 mL, 73920 mL,  
 73980 mL, 74040 mL, 74100 mL,  
 74160 mL, 74220 mL, 74280 mL,  
 74340 mL, 74400 mL, 74460 mL,  
 74520 mL, 74580 mL, 74640 mL,  
 74700 mL, 74760 mL, 74820 mL,  
 74880 mL, 74940 mL, 75000 mL,  
 75060 mL, 75120 mL, 75180 mL,  
 75240 mL, 75300 mL, 75360 mL,  
 75420 mL, 75480 mL, 75540 mL,  
 75600 mL, 75660 mL, 75720 mL,  
 75780 mL, 75840 mL, 75900 mL,  
 75960 mL, 76020 mL, 76080 mL,  
 76140 mL, 76200 mL, 76260 mL,  
 76320 mL, 76380 mL, 76440 mL,  
 76500 mL, 76560 mL, 76620 mL,  
 76680 mL, 76740 mL, 76800 mL,  
 76860 mL, 76920 mL, 76980 mL,  
 77040 mL, 77100 mL, 77160 mL

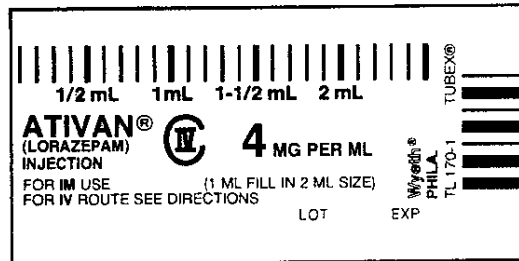
18. Mrs. Andis requires Reglan 10 mg IV q6 h. Reglan 5 mg/mL is available for injection. How many milliliters will the nurse administer? \_\_\_\_\_ .



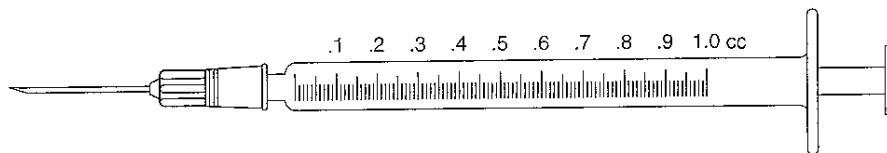
19. The physician orders Stadol 0.5 mg IM q4 h for Mrs. Switzer after childbirth. How many milliliters will the nurse administer? \_\_\_\_\_ .



20. Mr. Lewis requires Ativan 1 mg IM stat for severe agitation. How many milliliters will the nurse administer? \_\_\_\_\_ .



21. Mrs. Carroll requires Apresoline 10 mg IM q6 h for high blood pressure. Apresoline is supplied in 1-mL ampules containing 20 mg. How many milliliters will the nurse prepare? \_\_\_\_\_ .







25. Ordered AquaMEPHYTON 0.01 g IM qAM. How many milliliters will the nurse administer? \_\_\_\_\_ .

MULTIPLE DOSE VIAL FOR ROUTE OF ADMINISTRATION AND DOSAGE SEE ACCOMPANYING CIRCULAR. Store in a dark place. CAUTION: Federal (USA) law prohibits dispensing without prescription.

2.5 mL (No. 7782) 90793108

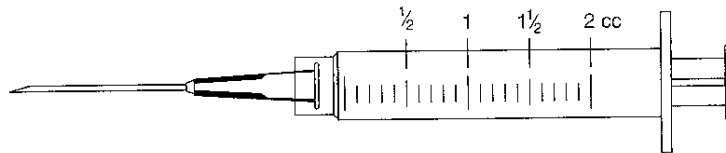
NDC 0005-7782-30

**2.5 mL INJECTION**

**AquaMEPHYTON®**  
(PHYTONADIONE)  
Aqueous Colloidal Solution

10 mg per mL

Dist. by: **MERCK & CO., INC.**  
West Point, PA 19380, USA



26. Ordered Cipro 0.3 g IV q12 h. How many milliliters will the nurse prepare? \_\_\_\_\_ .

FOR ADMINISTRATION, DILUTE with 200 mL of suitable diluent.

851640 NDC 0028-8564-64

Store between 41-86°F (5-30°C). Protect from light. Avoid freezing.

**CIPRO® I.V.**  
(ciprofloxacin) VC.I.D.

For complete product information, including Dosage and Administration, see accompanying package insert.

**SINGLE DOSE VIAL** contains: 40 mL sterile 1% solution

VOID

**400 mg ciprofloxacin** Bayer

**DILUTE BEFORE USE.** For intravenous (iv) infusion

Caution: Federal (USA) law prohibits dispensing without prescription.

Bayer Corporation  
Pharmaceutical Division  
400 Morgan Lane  
West Haven, CT 06516

PL500010 4760  
©1995 Bayer Corporation  
Printed in USA

27. Mrs. Ring, who has undergone a hysterectomy, has morphine 12 mg IM q4 h prn ordered for pain relief. How many milliliters will the nurse administer? \_\_\_\_\_ .

NDC 0002-1637-01

20 mL VIAL No. 336

POISON **Lilly** **CC**

**MORPHINE SULFATE 15**

**INJECTION, USP**  
15 mg per mL

Multiple Dose Exp. Date Control No.

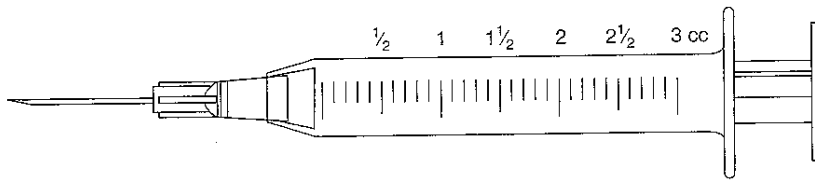
Store at Controlled Room Temperature, 20° to 25°C (68° to 77°F). Excipients include Benzyl Alcohol, Benzoin Resin, Chlorobutol, Ethyl Alcohol, Glycerin, Hydrochloric Acid, Methylparaben, Propylparaben, Sodium Chloride, and Water for Injection, USP.

ES: Lilly & Co., Indianapolis, IN 46205, U.S.A.

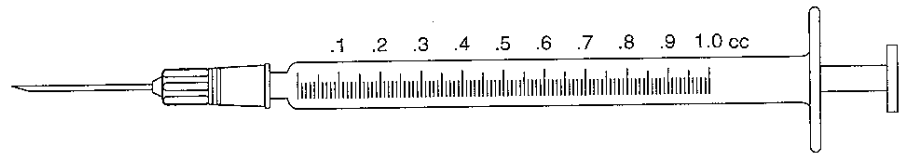
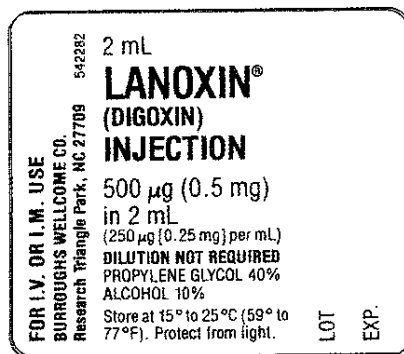
APPROXIMATE VOLUME SCALE

20  
15  
10  
5

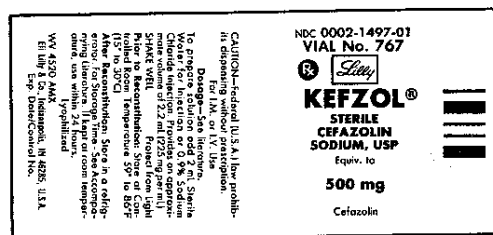
28. Ordered Benadryl 100 mg IM qid. The drug is supplied in ampules containing 50 mg per mL. How many milliliters will the nurse administer? \_\_\_\_\_ .



29. Mr. Fields requires digoxin 100 mcg IM qd for his cardiac dysrhythmia. How many milliliters will the nurse administer? \_\_\_\_\_ .



30. Ordered Kefzol 500 mg IV q6 h x 4 days. How many milliliters will the nurse prepare? \_\_\_\_\_ .







37. Ordered meperidine 75 mg IM q4 h prn. How many milliliters will the nurse administer? \_\_\_\_\_ .

LOT \_\_\_\_\_  
EXP. \_\_\_\_\_

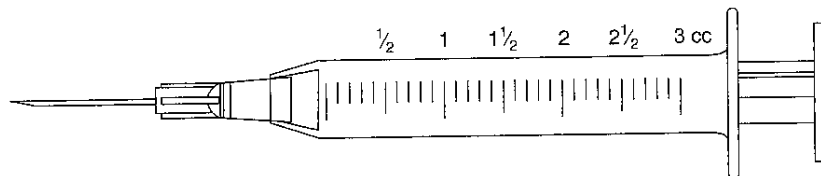
To open—Cut seal along dotted line.

25 DOSETTE® Vials  
Each contains 1 mL

**MEPERIDINE** CII  
HCl INJECTION, USP  
**100 mg/mL**

**NDC 0641-0160-25**  
Each mL contains meperidine hydrochloride 100 mg, sodium metabisulfite 1.5 mg and phenol 5 mg in Water for Injection. Buffered with acetic acid-sodium acetate, pH 3.5-6.0. Sealed under nitrogen.  
USUAL DOSAGE: See package insert.  
Do not use if precipitated.  
Store at controlled room temperature 15°-30°C (59°-86°F).  
Caution: Federal law prohibits dispensing without prescription.  
Product Code: 0160-25 B-50160

ELKINS-SINN, INC. Cherry Hill, NJ 08003-4099  
A subsidiary of A. H. Robins Company



38. Your patient with chronic obstructive pulmonary disease (COPD) receives aminophylline 75 mg q 6 h. How many milliliters will you prepare? \_\_\_\_\_ .

20 ml DOSETTE® AMPUL

**AMINOPHYLLINE**  
INJECTION, USP

**500 mg/20 ml**  
(25 mg/ml)

Anhydrous Theophylline 19.7 mg/ml  
FOR SLOW INTRAVENOUS USE  
PROTECT FROM LIGHT  
DO NOT USE IF CRYSTALS HAVE SEPARATED

**esi** ELKINS-SINN, INC.  
CHERRY HILL, NJ 08034

LOT \_\_\_\_\_  
EXP \_\_\_\_\_

39. Ordered Naloxone 0.6 mg IM stat. How many milliliters will the nurse prepare? \_\_\_\_\_ .

10 mL Multiple Dose Vial  
NDC 0641-2521-41

**NALOXONE**  
HCl INJECTION, USP

**400 mcg/mL**  
(0.4 mg/mL)

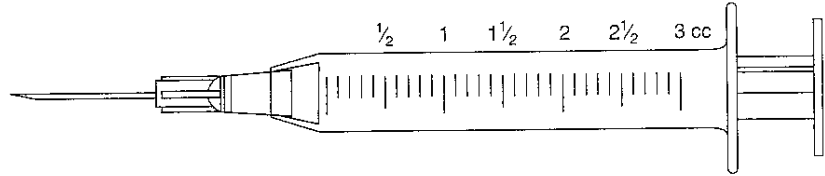
FOR INTRAMUSCULAR,  
SUBCUTANEOUS OR  
INTRAVENOUS USE

Each mL contains naloxone hydrochloride, 400 mcg, sodium chloride, 1.8 mg, and propylparaben, 0.2 mg in Water for Injection pH 3.0 ± 0.5. Naloxone is a weak base and should be adjusted to pH 7.0 ± 0.5. See package insert for complete prescribing information.

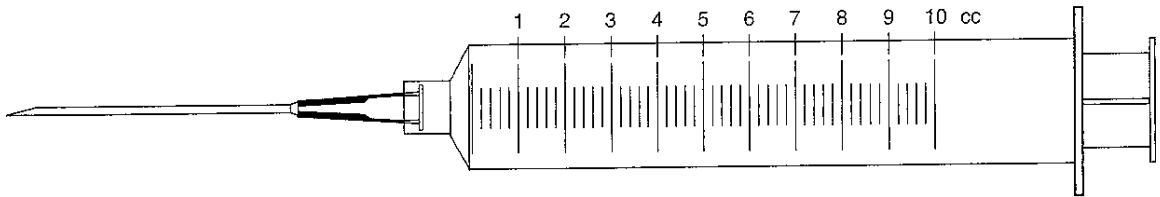
Save at controlled room temperature (20°-25°C) (68°-77°F).  
REFILLABLE VIAL.  
PROTECT FROM LIGHT.  
Keep capped in carton for protection from light.  
Caution: Usual, but possible dispensing without prescription.  
Product Code  
Lot: 2521-41  
A-25216  
LOT

ELKINS-SINN, INC. Cherry Hill, NJ 08003  
A Subsidiary of E. I. du Pont de Nemours & Company

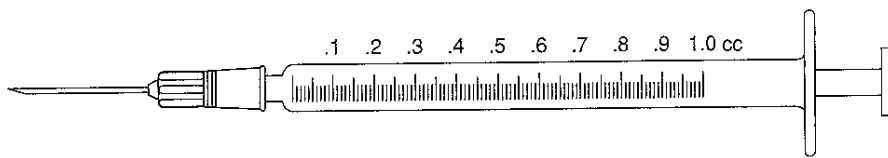
EXP  
SAMPLE COPY



40. Ordered Valium 10 mg IV stat. Valium is supplied in a 10-mL vial containing 5 mg per mL. How many milliliters will the nurse prepare? \_\_\_\_\_ .



41. Mr. Norcross has psoriasis and requires hydrocortisone 25 mg IM qd. The drug is available at a concentration of 100 mg per 2 mL. How many milliliters will the nurse administer? \_\_\_\_\_ .



42. Your patient with a *Pseudomonas* infection receives Kantrex 400 mg IM q12 h. How many milliliters will you administer? \_\_\_\_\_ .

NDC 0015-3582-20

**Kantrex**  
KANAMYCIN  
SULFATE INJECTION  
For I.M. or I.V. Use  
EQUIVALENT TO

**500 mg**  
KANAMYCIN  
per 2 mL

BRISTOL LABORATORIES  
Div. of Bristol-Myers Company  
Kantrex is a sterile, lyophilized, white, crystalline powder, containing 500 mg of Kanamycin Sulfate per 2 mL of water, buffered with 2.2% sodium citrate. \* Adjusted to pH 4.5 with H<sub>2</sub>SO<sub>4</sub>. \* Kantrex Injection should not be physically mixed with other antimicrobials.

READ INSTRUCTIONS  
REDOUSULE

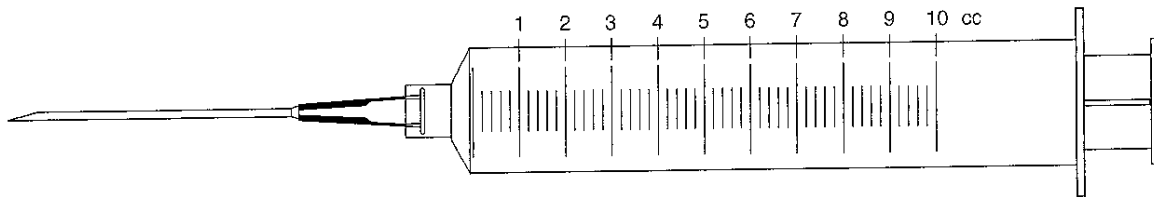
CAUTION: Federal law prohibits dispensing without prescription.  
© Bristol Laboratories  
3392600PL-12

MAXIMUM DAILY DOSE: 1.5 GRAM

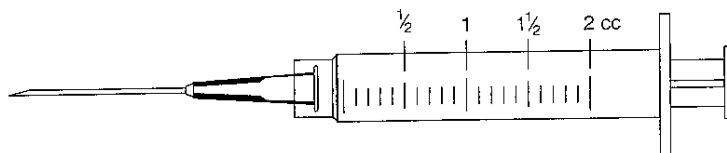
Lot  
Exp. Date

43. The physician orders ascorbic acid 0.25 g IM qd for your patient admitted with an alcohol abuse problem. You have ascorbic acid 500 mg per mL. How many milliliters will you administer? \_\_\_\_\_ .

44. Ordered D<sub>5</sub>W 250 mL plus calcium chloride (CaCl<sub>2</sub>) 5 mEq at 2 mL per h IV. CaCl<sub>2</sub> is supplied in a 10-mL ampule containing 13.6 mEq. How many milliliters of CaCl<sub>2</sub> will be added to the 250 mL of D<sub>5</sub>W? \_\_\_\_\_ .

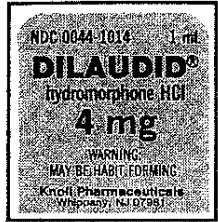


45. The physician orders phenobarbital 70 mg SQ q8 h for your patient with epilepsy. The drug is supplied in a 1-mL ampule containing 65 mg. How many milliliters will you administer? \_\_\_\_\_ .

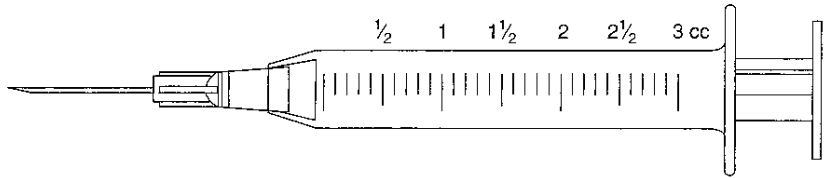
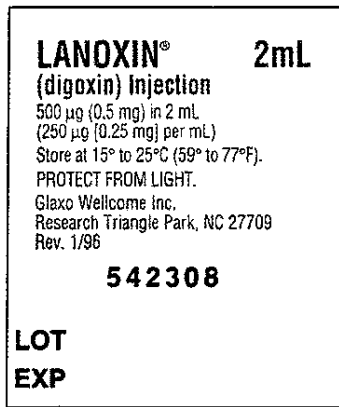


46. Ordered Vibramycin 200 mg IV qd. You have Vibramycin 10 mg per mL after reconstitution. How many milliliters will you prepare? \_\_\_\_\_ .

47. Ordered Dilaudid gr  $\frac{1}{30}$  IM q4 h prn. How many milliliters will the nurse administer? \_\_\_\_\_.



48. Your patient with atrial fibrillation has digoxin 0.2 mg IM qd ordered. How many milliliters will you administer? \_\_\_\_\_.



49. Ordered Morphine gr  $\frac{1}{8}$  SQ q3 h. How many milliliters will the nurse administer? \_\_\_\_\_.

