Bethel College

Lower Level Math/Drug Proficiency Spring Review 2

Calculate the following problems. Unless indicated, all medications involving mL greater than 1 should be rounded to the nearest tenth. Answers in mL that are less than 1 should be rounded to the nearest hundredth. All answers involving tablets should be recorded in terms of # of tabs (or ½ tabs).

1. 45 mL = _____oz.

2. The order is for Digoxin 250 mcg. The available drug is Digoxin tablets 0.125 mg. How many tabs will you give? _____tab.

3. The order is heparin 18,000 units every 8 hours. You have heparin 20,000 units per mL. How many mL will you give? _____mL.

4. The order is for Keflin 2 g in 150 mL IVPB to be infused over 1 ½ hours. The set calibration is 15 gtts/mL. What is the flow rate in mL/hr and gtts/min?
   _____mL/hr. _____gtts/min.

5. The order is to run 500 mL for 10 hours using a microdrip. What is the flow rate? _____gtts/min.

6. You have orders to give Solu-Medrol 90 mg IVP every 8 hours. The medication comes prepared with 120 mg in 2 mL. How much will you administer?
   _____mL.

7. The physician has ordered Digoxin 0.125 mg IVP stat in addition to the usual morning dose. The medication comes with 500 mcg in 2 mL. How much will you draw up and administer for this order?
   _____mL.

8. You have orders to give Phenergan 25 mg IM prn nausea and vomiting. The medication comes in an ampule with 50 mg per 1 mL. How much will you draw up to administer?
   _____mL.

9. The physician orders Isolyte H (1000 mL) to infuse over 8 hours. How fast will you administer this IV in both mL/hr and gtts/min with tubing that has a drop factor of 20 gtts/mL?
   _____mL/hr. _____gtts/min.

10.The patient you are caring for has an IV infusing at 85 mL/hr and there is about 400 mL left up in the bag. How long will it take this IV to finish infusing?
_____hr.

11.The physician has ordered Mefoxin 1 gram to be given IVPB every 8 hours. The medication comes from pharmacy in 50 mL. The drug book states this can be given over 30 minutes. How fast will you infuse this medication in mL/hr and gtts/min with an IV tubing drop factor of 10 gtts/mL?
   _____mL/hr. _____gtts/min.

12.You have orders to give Diflucan 200 mg IVPB QD to a patient with a yeast infection. The medication comes from pharmacy in 100 mL. The drug book tells you to administer the medication over 1 hour. How fast will you administer this drug in mL/hr and gtts/min with IV tubing that has a drop factor of 15 gtts/mL?

_____mL/hr. _____gtts/min.

13.You are receiving a patient from the Emergency room with pneumonia. They have orders to give Ancef 2 grams IVPB stat. The medication comes mixed in 50 mL and the drug book states to administer the medication over 20 min. How fast will you administer this medication in both mL/hr and gtts/min. The IV tubing has a drop factor of 10 gtts/mL.

_____mL/hr. _____gtts/min.

14.Your patient's IV is ordered to run at 150 mL/hr. How will you infuse this with IV tubing that has a drop factor of 20 gtts/mL?

_____gtts/min.

15.You have orders to give Lasix 100 mg IVPB every 12 hours. The pharmacy sends the medication up in a 100 mL bag. The label reads
NS 100 mL with Lasix 100 mg 10 mL for a total volume of 110 mL. How fast will you infuse this medication? The drug book states to give it at
2 mg/min.

_____mL/hr.

16.You have orders to infuse a 1500 mL solution of hyperal from 1900 in the evening to 0600 in the morning. How fast will you administer this solution? _____mL/hr.

17.You have orders to give Aspirin gr 5 stat to a patient admitted with chest pain. The tablets come with 325 mg per tablet. How many will you administer?
_____tab.

18.You are admitting a patient with a pulmonary embolus who needs to be started on Heparin. You have orders for a bolus of 60 units/kg IV. The patient weighs 200 lbs. The Heparin comes prepared in a vial with 10,000 units/mL. How many units will you need to give and how many mL will you draw up to give this dose?
_____units. _____mL.

19.You will now start the patient in question #18 on a Heparin drip at 12 units/kg/hr. The Heparin comes prepared with 25,000 units in 500 mL D5W. How many units/hr will you be giving and how many mL/hr will you set the pump for?
_____units/hr. _____mL/hr.