

Bethel College
Fundamentals of Nursing

Upper Level Math/Drug Proficiency Fall 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 $\frac{1}{2}$ tabs).

1. The order is to restrict IV fluid intake to 1200 mL/24 hour. You are caring for this client on the 11 pm-7 am shift. The intake and output record indicates the client has received 900 mL IV during the last 16 hour. What is the flow rate now? The set calibration is 20 gtts/mL. ____gtts/min.

2. Your client is to receive Atropine gr 1/100 subq stat. Atropine 0.4 mg per mL is available. Calculate the dosage. ____mL.

3. The pediatric dosage of a medication is 8 mg/kg every 4 hours. Calculate the daily and individual dosages for a child weighing 40 lbs.
____mg/dose. ____mg/day.

4. Codeine tablets have a strength of 30 mg. To prepare a gr $\frac{1}{4}$ dose you would give ____tab.

5. The normal pediatric dosage of a medication is 4 mg/kg every 6 hours. Calculate the daily dosage for a child weighing 40 lb. ____mg/day.

6. Your client needs to receive 45 mL of an IV solution every hour using microdrip tubing. Calculate the flow rate. _____gtts/min.
7. The order reads to give 6000 units of heparin. You have a 10 mL multi-dose vial of heparin labeled 10,000 units per 2 mL. How much would you need? _____mL.
8. You have orders to start a Heparin drip on a patient who weighs 190 lbs. The orders are for a 60 units/kg bolus of heparin and to start a heparin drip at 12 units/kg/hr. The Heparin comes mixed with 25,000 units in 500 mL. The vial for the bolus has 10,000 units in 1 mL. Calculate both the bolus and continuous drip.
 Bolus: _____units. _____mL.
 Continuous infusion: _____units/hr. _____mL/hr.
9. The orders for a 9 lb infant are to infuse Claforan IVPB 50 mg/kg. Calculate the correct pediatric dosage. _____mg.
10. The normal dose of pediatric medication is 15 mg/kg every 4 hours. Calculate the daily & individual doses for a child weighing 34 lbs.
 _____mg/dose. _____mg/day.

The medication comes prepared with 50 mg per 1 tsp. How much will you administer for 1 dose? _____tsp.

11. You have an IV of D5NS infusing at 80 mL/hr and you have tubing with a drip factor of 10 gtts/mL. How many gtts/min will you infuse this at? _____gtts/min.
12. You have an IVPB of 500 mg in 50 mL to run for 20 min. How many mL/hr will you infuse this at? With a tubing factor of 20 gtts/mL how many gtts/min will you use?
_____mL/hr. _____gtts/min.
13. During your 8 hour shift you need to infuse 600 mL of D5NS. The set calibration of the tubing is 15 gtts/mL. What is the flow rate?
_____mL/hr. _____gtts/min.
14. The normal pediatric dosage of medication is 60 mg every 4 hours. Calculate the daily dose for a child weighing 48 lbs. If the medication comes prepared with 125 mg/tsp. How much will you administer in 1 dose?
_____mg/day. _____tsp/dose.
15. Morphine 10 mg has been ordered. You have Morphine gr $\frac{1}{4}$ /mL available. You will give _____mL.

16. Vancomycin 100 mg is contained in 250 mL of NS and is to infuse over 2 hours. The set calibration of the tubing is 20 gtts/min. What is the flow rate?
_____mL/hr. _____gtts/min.

17. You have orders to give Tylenol grains 10. The tablets come prepared with 325 mg per tab. How many will you administer? _____tab.

18. You have orders to infuse Rocephin 1 gram IVPB every 24 hours. The medication comes mixed in 50 mL. The drug book states to give it over 30 min. How fast will you administer the medication? _____mL/hr.

19. You have an IVPB with 60 mg in 100 mL. You are to administer this medication over 1 hour. How fast will you administer this medication? _____mL/hr.

20. You have orders to give KCL 40 meq IV over 4 hours. The medication comes from pharmacy in 250 mL NS and 20 mL of KCL. How fast will you administer this medication? _____mL/hr.

