

N322 Basic Concepts of Pharmacology

Lakeview College of Nursing

Med Math Practice Quiz 2

1. An intravenous infusion of sodium chloride 0.9% is prescribed to infuse at a rate of 120 mL/hr. The available tubing infuses at 10 gtt/mL. Calculate the gtt/min flow rate.

20 gtt/mL

2. 12,000 mcgs is equal to how many milligrams?

120 mg

3. A nurse is preparing to administer filgrastim 5mcg/kg subcutaneously. The client weighs 132 pounds. How many mcg of filgrastim will the nurse administer?

4. The nurse is preparing to administer a dose of 125 mg of methylprednisolone acetate. The following is a picture of the vial the nurse will be drawing the medication out of. How many mL will the nurse administer?

3.125 mL



5. An intravenous infusion of 1750 mL of Lactated Ringers is prescribed to infuse over 6 hours. The nurse is using a 20 gtt/mL set. Calculate gtt/min flow rates. Round to the nearest whole gtt.

97 gtt/mL

6. A nurse is completing an 8-hour I&O record for a client who consumed the following. 10 oz juice, 4 oz hot tea, a 250 mL Bolus of 0.9% Normal Saline. The nurse should record how many mL of intake on the client's record?

670 mL

7. The provider has ordered warfarin 7.5 mg po daily. The nurse has 5 mg tablets of warfarin available for administration. How many tablets should the client receive daily?

1.5 mg tablets

8. Use the heparin protocol below to answer the following question. A client that weighs 176 pounds. The nurse will start the client's initial (beginning) heparin therapy. At what rate will the client's heparin infuse (in units/hr)? **80 units/kg bolus = 18 units/kg/hr**

aPTT (sec)	Bolus Dose	Infusion Rate
Initial dose	80 units/kg bolus	Begin infusion at 18 units/kg/hr
aPTT <35 sec	80 units/kg bolus	Increase infusion rate by 4 units/kg/hr
aPTT 35-45 sec	40 units/kg bolus	Increase infusion rate by 2 units/kg/hr
aPTT >45-60	No bolus	Increase infusion rate by 2 units/kg/hr
aPTT >60-80	No bolus	No change
aPTT >80-90	No bolus	Decrease infusion rate by 2 units/kg/hr
aPTT >90	No bolus	Hold infusion for 1 hour then restart & decrease infusion rate by 3 units/kg/hr

9. Use the heparin protocol above to answer the following question. A client that weighs 132 pounds is receiving heparin therapy. Their most recent aPTT level was 36.7. How many units of heparin will the client receive in their bolus? **60 units kg bolus= 20 units/kg/hr.**