

**Semesters 3 and 4 Practice Test** (for students going into either  
Semester 3 or 4)

(20 questions, Types 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and )

**\*\*Hint: converting lbs. -> kg. round to the nearest tenth**

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1. 350 mL of D5 in 0.9% Sodium Chloride) has been prescribed for IV infusion over 1 hr. You are using an IV administration set that delivers 20 gtts/mL. You run the IV at \_\_\_gtts/min.
2. An IV of NS containing 100 units of Regular Iletin I (Insulin) and a total volume of 250 mL is to be infused at a rate o 3 units/hr. At how many mL/hr will you infuse the IV?
3. 15 mg of Brompheniramine must be prepared. The Brompheniramine is available in a 10 mL ampule labeled 10 mg in 1 mL. In preparing the drug, how many mL should you withdraw from the ampule?
4. Dopamine is to infuse at a rate of 5 mcg/kg/min. Your patient's current weight is 30.5 kg. How many mcg of Dopamine should infuse per min?
5. An IV will be administered using an infusion pump that delivers mL/hr. Lactated Ringer's Solution has been prescribed to run IV at a rate of 85 mL/6 hrs. The IV should infuse at how many mL/hr?
6. You need to verify that a prescribed dose of Zovirax (Acyclovir) for a patient currently weighing 68 kg is appropriate. The drug literature recommends 5 mg/kg/dose. You determine that an appropriate dose for this patient would be \_\_\_ mg per dose.
7. 350 mL of  $\frac{3}{4}$  strength Osmolite must be prepared for a tube feeding. You have available full strength Osmolite. To prepare the feeding, you dilute \_\_\_ mL of the full strength Osmolite with \_\_\_mL of water.

**8.** 0.5 g of Inocor (Amrinone Lactate) in NS has been prescribed for IV infusion at a rate of 300 mcg/min. The IV solution has a total volume of 250 mL. The IV should be infused at how many mL per hr?

**9.** Vepesid (Etoposide) has been prescribed for a patient with a current BSA of 2.01. The drug literature recommends 50-100 mg/m<sup>2</sup>/day. In checking the appropriateness of the drug order, you determine that \_\_\_ to \_\_\_ mg of Vepesid would be an appropriate dose per day.

**10.** A 0.9% solution can be expressed as a fraction, ?/? , or a ratio,?:?.

**11.** 0.25 g of Dobutrex (Dobutamine) in D5W is to be infused at a rate of 5 mcg/kg/min. The IV solution has a total volume of 250 mL. Your current weight is 158 lbs. At how many mL/hr will you infuse the IV?

**12.** D5W with Primacor (Milrinone Lactate) is infusing at a rate of 15 mL/hr. The IV solution was prepared by adding 20 mg of Primacor to D5W. The final solution contained a total volume of 100 mL. How many mg are infusing per hr? How many mg are infusing per min?

**13.** Dopamine in D5W is to be titrated 15-20 mcg/kg/min to maintain BP. The IV solution was prepared by adding 0.4 g of Dopamine to D5W. The final solution contained a total volume of 500 mL. Your patient's current weight is 65 kg. The IV solution should be infused at a rate of \_\_\_ to \_\_\_ mL/hr.

**14.** A child weighs 82 lbs. You determine that 82 lbs is equivalent to \_\_\_ kg.

**15.** 225 mL of ½ strength Traumacal must be prepared for a tube feeding. You have available full strength Traumacal. To prepare the feeding, you dilute \_\_\_ mL of the full strength Traumacal with \_\_\_ mL of water.

16. 15 mL of 1% mepivacaine HCl has been administered to a patient. The patient has received \_\_\_g of mepivacaine HCl.

17. A 1:20 solution for external use prepared from solid drug contains \_\_\_ g of drug per 20 mL of solution or \_\_\_ g of drug for every 1 mL of solution.

18. An IV will be administered using an infusion pump that delivers mL/hr. 0.9% NaCl(0.9% Sodium Chloride) has been prescribed to run IV at a rate of 75 mL/4hrs. The IV should infuse at how many mL/hr?

19. You have available in IV administration set that delivers 10 gtts/mL. D5W (5% Dextrose in Water) has been prescribed to run IV at a rate of 300 mL/1hr. The IV should infuse at how many gtts/min?

20. 100 mL of IV fluid contains 100 units of Regular Iletin I (Insulin). The solution was prepared by adding Regular Iletin I to NS. You know that \_\_\_ units of Regular Iletin I per mL are contained in the solution.

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### ANSWER KEY

1. 117
2. 7.5
3. 1.5
4. 153
5. 14
6. 340
7. 262.5;87.5
8. 9
9. 101;201
10. 9/1,000;9:1,000

- 11. 22
- 12. 3;0.05
- 13. 73;98
- 14. 37.3
- 15. 112.5;112.5
- 16. 0.15
- 17. 1;0.05
- 18. 19
- 19. 50