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Math Practice Questions

1. Express the following number to the nearest hundredth.
   a. 2.345 ___2.35___

2. Solve the following equation. Express your answer to the nearest tenth.
   a. 55 x 0.15 ___8.3___

3. Solve the equation. Express your answer as a decimal fraction to the nearest tenth.
   a. 0.114 x 3.2 ___0.4___

4. You are to give 1,250 mg of a medication and you receive 250 mg tablets from the pharmacy. How many tablets would you administer?
   a. ___5 tablets___

5. You have to administer a combination drug that combines 25 mg of medication A and 6.25 mg of medication B. Pharmacy has given you 12.5 mg tablets of medication A and 12.5 mg of medication B. How many tablets of medication B would you given?
   a. ___0.5 tablets___

6. You have to administer a prescription that combines two separate drugs of 50 mg of medication A and 12.5 mg of medication B. Pharmacy has given you 25 mg tablets of medication A and 6.25 mg of medication B. How many tablets of medication A would you give?
   a. ___2 tablets___

7. Express 750 mg in g
   a. ___0.75 g___

8. Express 0.75 mg in mcg
   a. ___750 ug___

9. The nurse needs to infuse 250 mL over 45 minutes by infusion pump. At what rate per hour does the nurse set the pump?
   a. ___333 mL/hour___

10. The doctor has ordered 1 liter D5W (IV fluid solution 5% dextrose and water) over 12 hours. At what rate per hour does the nurse set the pump?
    a. ___83 mL/hour___

11. Convert these body weights into kilograms. Round to the nearest tenth.
    a. 44.5 lbs = ___20.2 kg___
    b. 154 lbs = ___70 kg___
    c. 540 lbs = ___245.5 kg___
    d. 123 lbs = ___55.9 kg___

12. A doctor orders 75 mg of ceftriaxone to be taken by a 15 pound infant twice a day. The pharmaceutical reference states that 50-75 mg/kg/day is the appropriate dosage range. Is this doctor's orders within the desired range?
    a. ___Yes. the max dose per day is 510.8 mg or 255.4 twice a day___

13. The most commonly used parenteral administration routes are:
    a. Sublingual, intravenous, transdermal
    (b.) Intravenous, intramuscular, and subcutaneous
    c. Intravenous, inhalation, and subcutaneous

14. Insulin can be administered by what other routes?
    a. Subcutaneous, intravenous, self-administered pens
    b. Intramuscular, inhalation, intradermal
    c. Subcutaneous, intradermal, sublingual
15. One balanced electrolyte solution is which of the following?
    a. D5NS
    b. LR
    c. 0.9% NSS
    d. 0.45% NSS
16. Identify which of the following solutions is the weakest?
    a. 1:1000
    b. 1:10,000
    c. 1:5

285mL

17. There are two bottles of milk of magnesium on the shelf at the pharmacy. One bottle contains 9.5 oz and the other 300 mL. Which has the larger volume?
    a. ___300 mL bottle___
18. The recommended dose of Dilantin for a child is 3 mg/kg/24 hr given every 12 hours. The patient's weight is 10 lbs. The medication is supplied in 250 mg/10 mL.
    a. Calculate the weight for the child in kg ___4.5 kg___
    b. Calculate the safe dose for the child in mg/dose ___6.8 mg/dose___
    c. How many milliliters will be administered for each dose? ___0.3 mL___
19. The patient is ordered Tylenol elixir at 325 mg per 2 teaspoons (tsp.) How many mL would the nurse administer?
    a. ___10 mL___
20. An IV medication of 250 mL is started at 0750 to run at 33 gtts/min using a 10 gtts/mL set. How long will the infusion run?
    a. ___1.3 hours → 0908 end time___

N321 Adult Health I

Lab Week 1 Calculations

#9 $\dfrac{250\,mL}{45\,min} \times \dfrac{60\,min}{1\,hr} = 333.33\,mL/hr$

#10 $1\,L = \dfrac{1000\,mL}{12\,hr} = 83.33\,mL/hr$

#12 $\dfrac{max\ dose}{1\,day} = \dfrac{\left(\dfrac{75\,mg}{1\,kg}\right) \times 6.81\,kg}{1\,day} = \overset{max\ per\ day}{\dfrac{510.75\,mg}{1\,day}} \times \dfrac{1\,day}{2\,doses} = \overset{max}{255.4}\ mg/dose$

#20 $250\,mL \times \dfrac{10\,gtts}{1\,mL} \times \dfrac{1\,min}{33\,gtts} \times \dfrac{1\,hr}{60\,min} = 1.26\,hrs \rightarrow 1.3\,hrs$

0750 + 1.3 hrs → approx 0908 end time