COUNTY OF LOS ANGELES  
DEPARTMENT OF PUBLIC HEALTH  

Practice Medication Calculation Examination Answer Sheet

1. The order is for 200 mg. The label reads 250mg /5ml. You would give ____ml(s).
   \[\frac{200\text{ mg}}{250\text{ mg}/5\text{ ml}} = 4\text{ ml}\]

2. The order is for 60mg. The label reads gr. 1 per tablet. You would give ____tablet(s).
   \[1\text{ gr.} = 60\text{ mg} : 1\div 1 \times 1 \text{ tablet} = 1 \text{ tablets}\]

3. The order is for 60 ml. You would give ____tablespoon(s).
   \[1\text{ Tbsp} = 15\text{ ml} : 60\div 15 = 4\text{ tablespoons}\]

4. The order is for 60mg. The label reads 60 mg/2 ml. You would give ___ml.
   \[60\div 60 \times 2\text{ ml} = 2\text{ ml}\]

5. The order is for 1000 ml. of I.V. solution to be infused at 125 ml/hr. You would infuse the solution for ___hours.
   \[1000\div 125 = 8\text{ hours}\]

6. The order is for 6000 ml of IV solution to run over a 24 hour period. The drop factor of the I.V tubing is 10 gtts/ml. You would infuse _____gtts/min.
   \[6000\text{ ml} \times 10\text{ gtts/ml} \div 24\text{ hour} \times 60\text{ minutes} = 41.66\text{ gtts/min}\]

7. Your patient weighs 75 kg and you are ordered to infuse 250 mg dobutamine in 500 ml NS at 10 mcg/kg/min. How many milligrams of dobutamine will infuse per hour?
   \[10\text{ mcg} \times 75\text{ kg} \times 60\text{ minutes} = 45000\div 1000\text{ (convert mcg to mg)} = 45\text{ mg/hour}\]

8. The order is 500 mg of Rocephin to be taken by a 15.4 lb infant every 8 hours. The medication label shows that 75-150 mg/kg per day is the appropriate dosage range. How much will the patient receive per day? Is this within the normal range?
   \[7\text{ kg} \times 75 = 525\text{ mg} \text{ (minimum dosage)} \quad 7\text{ kg} \times 150 = 1050\text{ mg} \text{ (maximum dosage)}\]
   \[24\div 8 = 3 \text{ doses}\]
   \[500\text{ mg} \times 3 = 1500\text{ mg per day}\]
   No, not within the normal range
9. The order is Solumedrol 3mg/kg for a child weighing 20kg. Solumedrol is available as 125 mg / 2 ml. How many ml must the nurse administer?

   \[3 \times 20 = 60 \text{ mg}; \quad 60 \div 125 \times 2 = 0.96 \text{ ml}\]

10. The order: KayCiel 30 mEq PO Bid pc.

    Available: Kay Ciel 45 mEq/15 ml.

    How many ml of KayCiel should you administer?

    \[30 \div 45 \times 15 \text{ ml} = 10 \text{ ml}\]

11. The order is for 25 mg. The label reads 75mg/ml. How many ml(s) would you give?

    \[25 \text{ ml} \div 75 \text{ ml} \times 1 \text{ ml} = 0.33 \text{ ml}\]

12. The order is for 1.5 g. The label reads 1 tablet equals 3 g. How many tablet(s) would you give?

    \[1.5 \text{ gm} \div 3 \text{ gm} \times 1 \text{ tablet} = 0.5 \text{ tablet}\]

13. The order is for 400mcg of thyroxin. The label reads 0.2 mg tablets.

    How many tablets would you give?

    \[400 \div 1000 = 0.4; \quad 0.4 \div 0.2 \times 1 \text{ tablet} = 2 \text{ tablets}\]

14. The order is Penicillin G 1.2 million units IM daily.

    Available: Penicillin G 9 million units/1 ml.

    How many ml will you give?

    \[1.2 \text{ units} \div 9 \text{ units} \times 1 = 0.13 \text{ ml}\]

15. Convert 75 lbs into kg.

    \[75 \div 2.2 = 34.1 \text{ kg}\]