

Dosage Calculation Worksheet #4

1. Ordered is flucloxacillin 250mg IM. Available is 1 G in 10 mL. How much should the nurse administer in mL?

1g = 1000mg      $\frac{DV}{H}$       $250 \div 1000 = 0.25g$   
 $0.25g \times 10 mL = 2.5 mL$

2. Order: Administer 160 mg IV. Available is 100 mg/2 mL. How much should the nurse administer in mL?

$\frac{DV}{H}$       $\frac{160 mg}{100 mg} \times 2 mL = 3.2 mL$

3. Azulfidine 1.5 g has been ordered every 12 hrs. Available are 500mg tablets. How many tablets should the nurse administer per day?

1g = 1000 mg      $1.5 \times 1000 = 1,500 \times 1 tab = 3 tablets$   
 $500 mg \times 2 = 6 tablet per day$

4. Ergotrate maleate 200 mcg is ordered po daily. Available is 0.2 mg. How many tablets should the nurse administer?

1mcg = 1000 mg      $200 \div 1000 = 0.2 mg$   
 $0.2 mg \times 1 tab = 1 tablet$

5. From 0700 to 1900 the nurse calculates the patient's total intravenous fluid intake as \_\_\_?\_\_\_ milliliters. An IV is infusing at 50 mL/hour. At 0900 the patient will receive IVPB of 125 mL for 30 minutes. What is the total amount in mL the patient will receive during this time?

07:00 - 09:00 = 100 mL     10:00 - 19:00 = 450 mL  
 09:00 - 09:30 = 125 mL  
 09:30 - 10:00 = 25 mL  
 = 700 mL

6. Solumedrol 1.5 mg/kg is ordered for a child weighing 42 lb. Solumedrol is available as 75 mg / 1 mL is available. How many mL must the nurse administer?

$42 \div 2.2 = 19 kg \times 1.5 mg = \frac{28.5 mg}{75 mg} \times 1 mL = 0.4 mL$

7. Give patient 17.1 mg of dopamine in 223 mL of D5W to be infused at a rate of 17,221 mcg/hr. Calculate the flow rate in mL/hr.

1 mcg = 1000 mg      $17,221 \div 1000 = 17.221 mg$   
 $\frac{17.221 mg}{17.1 mg} \times 223 mL = 224.6 mL/hr$

8. Calculate the IV flow rate for 0.2 L of D5W IV over 462 min. Infusion set has drop factor of 59 gtt/mL. What is the IV flow rate in gtt/min?

0.2 L x 1000 = 200 mL  
 1 L = 1000 mL  
 $\frac{200 mL}{462 min} \times 59 gtt = 25.5 gtt/min$

9. Ordered Lasix 24 g IV push now. Available: 22,000,000 mcg in 12 mL. How much will the nurse draw up?

1 g = 1,000,000 mcg

22,000,000 ÷ 1,000,000 = 22 g

$$\frac{24 \text{ g}}{22 \text{ g}} \times 12 \text{ mL} = 13.1 \text{ mL}$$

10. Calculate the IV flow rate for 392 mL of D5W IV over 582 min. Infusion set has drop factor of 74 gtts/mL. What is the IV flow rate in gtts/min?

$$\frac{392 \text{ mL}}{582 \text{ min}} \times 74 \text{ gtts} = 49.84 \rightarrow 49.8 \text{ gtts/min}$$

11. From 0700 to 1800 the nurse calculates the patient's total intravenous fluid intake as 1 milliliters. An IV is infusing at 100 mL/hour. At 0900 and 1500, the patient will receive IVPB of 75 mL for 30 minutes. What is the total amount the patient will receive during this time?

07:00 - 09:00 = 200 mL  
 09:00 - 09:30 = 75 mL  
 09:30 - 10:00 = 50 mL  
 10:00 - 15:00 = 500 mL  
 15:00 - 15:30 = 75 mL  
 15:30 - 16:00 = 50 mL  
 16:00 - 18:00 = 200 mL

1,150 mL

12. Ordered 7 g of Amoxicillin. Amoxicillin is available as 0.016 kg per 20 mL. How much will the nurse draw up?

$$7 \text{ g} \div 1000 = 0.007 \text{ kg} \times 20 \text{ mL} = 8.75 = 8.8 \text{ mL}$$

13. Potassium chloride is available as 0.016 kg per tablet. Potassium Chloride (K-Dur), 24,000,000 mcg, is ordered. How many tablets would the nurse administer?

$$24,000,000 \div 1,000 = 24,000 = 24 = 0.024 \text{ kg} \times 1 \text{ tablet} = 1.5 \text{ tablet}$$

14. Aggrastat at 23.8 mg in 129 mL is to be infused at 3 mcg/kg/hr in a patient who weighs 82 kg. At what flow rate in mL/hr will you set the pump?

1 mcg = 1000 mg  
 23.8 × 1000 = 23,800

$$82 \text{ kg} \times 3 \text{ mcg} = 246 \text{ mcg} \times 129 \text{ mL} = 1.3 \text{ mL/hr}$$

15. Administer 0.06 g of codeine po now. Available are 30 mg tablets. How many tablets should the nurse administer?

1 g = 1000 mg

$$0.06 \text{ g} \times 1000 = 60 \text{ mg} \times 1 \text{ tablet} = 2 \text{ tablets}$$