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Dosage Calculation Worksheet #2

1. The IV order is for D_5W to infuse at 100 mL/hr. The drop factor is 10 gtt/mL. How many drops per minute (gtt/min) should the pump be set to run? Round final answer to whole number. $100\,mL \times 10 = 1000 / 60 = 16.6$

   <mark>17 gtts/min</mark>

2. Medication order: Rocephin 1 g IV every 12 hours over 30 minutes. Available: rocephin 1 g in 150 mL NS. At what rate would you set your pump?
   150mL

   $150 / 0.5 = 300$

   <mark>300 mL/hr</mark>

3. Medication order: Vistaril 20 mg IM q4h PRN for nausea. The 10 mL vial that you have available is labeled 25 mg/mL. How many mL will you draw up to give?

   $\dfrac{25mg}{1\,mL} = \dfrac{20mg}{X\,mL}$ $25X = \dfrac{20}{25}$

   $X = 0.8$ <mark>0.8 mL</mark>

4. Medication order: Haldol 3 mg IM q6h PRN for agitation. The 1 mL vial that you have available is labeled 5 mg/mL. How many mL will you draw up to give?

   $\dfrac{5mg}{1\,mL} = \dfrac{3mg}{X\,mL}$ $5X = \dfrac{3}{5}$

   $X = 0.6$ <mark>0.6 mL</mark>

5. Medication order: heparin 5000 units subQ every 12 hours. Drug available: heparin 10,000 units/2 mL. How many mL will you administer for the day?

   $\dfrac{10,000}{2mL} = \dfrac{5000}{X\,mL}$ $10,000X = \dfrac{10,000}{10,000}$

   $X = 1 \times 2 = 2\,mL$ <mark>2 mL/day</mark>

6. A patient has an order for 200 mg q8h of cimetidine (Tagamet) to be administered intramuscularly. The vial of 8 mL contains 300 mg per 2 mL. How many mL would you give q8h? per dose $300X = \dfrac{400}{300}$

   $\dfrac{300mg}{2\,mL} = \dfrac{200mg}{X\,mL}$ $X = 1.33$ <mark>1.3 mL</mark>

7. Medication order: Garamycin 80 mg IVPB over 30 minutes. Available: Garamycin (gentamicin sulfate) 80 mg in 50 mL of D_5W. Calculate the flow rate in mL/hr.

   $50mL / 0.5 = 100$

   <mark>100 mL/hr</mark>

8. You have an IV infusing at 125 mL/hr. How long will it take 1500 mL to infuse?

$1500/125 = 12\ hrs$ 12 hrs

9. Medication order: rocephin g 1 IV ~~every 12 hours~~ over 30 minutes. Available: rocephin 1 g in 150 mL NS. At what rate would you set your pump? mL/hr

$150/0.5 = 300$

300 mL/hr

10. An infusion pump is set to administer 75 mL/hr to a patient. How many hours will it take for the patient to receive 600 mL of fluid?

$600/75 = 8\ hrs$

8 hrs

11. A patient is to receive lidocaine hydrochloride (Xylocaine) 100 mg as an intravenous bolus. The Xylocaine is labeled 20 mg/mL. How many milliliters should be administered?

$\dfrac{20mg}{1mL} = \dfrac{100mg}{XmL}$ $20X = \dfrac{100}{20} = 5$

5 mL

12. Medication order: 50 mg/kg/day. Patient weight: 85.8 pounds. The patient will receive
_____ mg/day.

÷2.2=39

$50\ mg/39\ kg/day$
$= 1950\ mg$

1950 mg

13. Medication order: Amoxicillin 2.5 mL every 8 hours. Available is Amoxicillin 250 mg/5mL. The nurse will administer how many mg for the day?

×3

$\dfrac{250mg}{5mL} = \dfrac{X}{7.5mL}$ $2.5 \times 3 = 7.5$

$5X = \dfrac{1875}{5} = 375$

375 mg

14. Medication order: Ondansetron 2 mg – 4 mg/kg/Q 4 hours po PRN nausea. The patient weighs 66 lbs. What is the minimum amount of medication in grams that can be administered every 4 hours? $66/2.2 = 30kg$

$2mg/30\ kg = 60mg$

K H D □ d c m   0.060

0.06 g

15. Medication order: 5 mL of normal saline is added to a vial of Lasix 20 mg/5 mL. How many milligrams of Lasix are in each millimeter of fluid?

$\dfrac{20mg}{5mL} = \dfrac{20mg}{10mL}$
(4 mg/mL)   (2 mg/mL)

2 mg/mL