

Dosage Calculation Worksheet #2

1. The IV order is for D₅W 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.

$$\frac{1 \text{ hr}}{60 \text{ min}} \cdot \frac{100 \text{ mL}}{1 \text{ hr}} \cdot \frac{10 \text{ gtt}}{1 \text{ mL}} = \frac{1000}{60} = 16.6 \rightarrow \boxed{17 \text{ gtt}}$$

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?

$$1 \text{ g} / 1 \text{ g} \times 150 \text{ mL} = 150 \text{ mL}$$

$$\boxed{300 \text{ mL/hr}}$$

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?

$$20 \text{ mg} \cdot \frac{1 \text{ mL}}{25 \text{ mg}} = \frac{20}{25} = \boxed{0.8 \text{ mL}}$$

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?

$$3 \text{ mg} \cdot \frac{1 \text{ mL}}{5 \text{ mg}} = \frac{3}{5} = \boxed{0.6 \text{ mL}}$$

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?

$$5000 \text{ units} \cdot \frac{2 \text{ mL}}{10,000 \text{ units}} = \frac{10000}{10000} = 1 \text{ mL} \quad \boxed{2 \text{ mL}}$$

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?

$$200 \text{ mg} \cdot \frac{2 \text{ mL}}{300 \text{ mg}} = \frac{400}{300} = 1.3 \quad \boxed{1.3 \text{ mL}}$$

7. Medication order: Garamycin 80 mg IVPB over 30 minutes. Available: Garamycin (gentamicin sulfate) 80 mg in 50 mL of D₅W. Calculate the flow rate in mL/hr.

$$80 \text{ mg} / 80 \text{ mg} \times 50 \text{ mL} = 50 \text{ mL}$$

$$\boxed{100 \text{ mL/hr}}$$

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

$$1500 \text{ mL} \cdot \frac{1 \text{ hr}}{125 \text{ mL}} = \frac{1500}{125} = \boxed{12 \text{ hours}}$$

9. 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?

$$\frac{1 \text{ g}}{1 \text{ g}} \cdot 150 \text{ mL} = 150 \text{ mL} \quad \boxed{300 \text{ mL/hr}}$$

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?

$$600 \div 75 = 8 \quad \boxed{8 \text{ hours}}$$

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?

$$100 \text{ mg} \cdot \frac{1 \text{ mL}}{20 \text{ mg}} = \frac{100}{20} = \boxed{5 \text{ mL}}$$

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

$$85.8 \div 2.2 = 39$$

$$50 \times 39 = 1950$$

$$\boxed{1950 \text{ mg/day}}$$

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?

$$2.5 \text{ mL} \cdot \frac{250 \text{ mg}}{5 \text{ mL}} = \frac{625}{5} = 125 \quad \boxed{375 \text{ mg}}$$

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?

$$66 \text{ lbs} \div 2.2 = 30$$

$$30 \cdot 2 = 60 \text{ mg/dose}$$

$$\boxed{0.06 \text{ g}}$$

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?

$$5 \quad \boxed{4 \text{ mg/mL}}$$