

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.

$$100\text{mL} / 60\text{min} = 1.66666667\text{mL}/\text{min}$$

$$1.66666667\text{mL}/\text{min} \times 10\text{gtt} = 16.6 = 17\text{gtt}/\text{min}$$

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?

$$12\text{hrs} / 24\text{hrs} = 2\text{sets of } 30\text{min}$$

$$150\text{mL} \times 2 = 300\text{mL}/\text{hr}$$

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?

$$20\text{mg} / 25\text{mg} \times 1\text{mL} = 0.8\text{mL}$$

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?

$$3\text{mg} / 5\text{mg} \times 1\text{mL} = 0.6\text{mL}$$

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?

$$5000\text{units} / 10000\text{units} \times 2\text{mL} = 1\text{mL every two hours}$$

$$1\text{mL} \times 2 = 2\text{mL for a day}$$

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?

$$200\text{mg} / 300\text{mg} \times 2\text{mL} = 1.3\text{mL}$$

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.

$$1 \text{ hr} = 60 \text{ min}$$

$$30\text{min} / 60\text{min} = 2$$

$$50\text{mL} \times 2 = 10\text{mL/hr}$$

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

$$1500\text{mL} / 125\text{mL} = 12\text{hrs}$$

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?

$$12\text{hrs} / 24\text{hrs} = 2\text{sets of } 30\text{min}$$

$$150\text{mL} \times 2 = 300\text{mL/hr}$$

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?

$$600\text{mL} / 75\text{mL} = 8\text{hrs}$$

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?

$$100\text{mg} / 20\text{mg} \times 1\text{mL} = 5\text{mL}$$

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

$$85.8\text{lbs} / 2.2 = 30\text{kg}$$

$$50\text{mg} \times 30\text{kg} = 1500\text{mg/day}$$

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?

$$2.5\text{mL} / 5\text{mL} \times 250\text{mg} = 125\text{mg q8h}$$

$$8\text{hrs} / 24\text{hrs} = 4\text{hrs}$$

$$125\text{mg} \times 4\text{hrs} = 500\text{mg a day}$$

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?

$$66\text{lbs} / 2.2 = 30\text{kg}$$

$$2\text{mg} \times 30\text{kg} = 60\text{mg q4h}$$

$$60\text{mg} / 1000 = 0.06\text{g q4h}$$

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?

$$20\text{mg} / 5\text{mL} = 4\text{mg/mL}$$