

Dosage Calculation Worksheet #4

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

$$1 \text{ G} \rightarrow 1000 \text{ mg} \quad 250 \text{ mg} \cdot \frac{10 \text{ mL}}{1000 \text{ mg}} = \frac{2500}{1000} = 2.5$$

2.5 mL

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

$$100 \text{ mg} \cdot \frac{2 \text{ mL}}{100 \text{ mg}} = 3.2 \text{ mL}$$

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

$$1.5 \text{ g} \rightarrow 1500 \text{ mg} \quad 3 \text{ tabs } @ 4 \text{ hrs}$$

4 tablets

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

$$200 \text{ mcg} \rightarrow 0.2 \text{ mg}$$

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?

$$11 \times 50 = 550 \text{ mL} + 25 \text{ mL} = 575 \text{ mL} + 125 =$$

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?

$$42 \div 2.2 = 19.1 \text{ kg} \\ 19.1 \times 1.5 = 28.7 \text{ mg}$$

$$28.7 \text{ mg} \cdot \frac{1 \text{ mL}}{75 \text{ mg}} = 0.382$$

0.38 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.

$$17.1 \text{ mg} \rightarrow 17,100 \text{ mcg} \quad \frac{17,221}{17,100} \times 223 = 224.6 \text{ mL/hr}$$

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

$$0.2 \text{ L} \rightarrow 200 \text{ mL}$$

$$\frac{200 \times 59}{462} = 24 \text{ gtts/min}$$

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

$$24 \text{ g} \rightarrow 24,000,000 \text{ mcg} \quad 24,000,000 \text{ mcg} \cdot \frac{12 \text{ mL}}{22,000,000} = \boxed{13.1 \text{ mL}}$$

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?

$$\frac{392 \cdot 74}{582} = \boxed{50 \text{ gtts/mL}}$$

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?

$$11 \text{ hrs} \quad 100 \times 10 = 1000 \text{ mL} \quad \boxed{1,150 \text{ mL}}$$

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

$$7 \text{ g} \rightarrow .007 \text{ kg} \quad 0.007 \text{ kg} \cdot \frac{20 \text{ mL}}{0.016 \text{ kg}} = \boxed{8.8 \text{ mL}}$$

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?

$$24,000,000 \div 1000 = 24,000 \text{ mcg} \quad 0.024 \text{ kg} \cdot \frac{1 \text{ tab}}{0.016 \text{ kg}} = \boxed{1.5 \text{ tablets}}$$

$$24,000 \div 1000 = 24 \text{ g}$$

$$24 \div 1000 = 0.024 \text{ kg}$$

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?

$$82 \times 3 = 246 \text{ mcg} \quad \frac{246}{23800} \times 129 = \boxed{1.3 \text{ mL/hr}}$$

$$23.8 \text{ mg} = 23800 \text{ mcg}$$

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

$$0.06 \text{ g} \rightarrow 60 \text{ mg} \quad \boxed{2 \text{ tablets}}$$