

Brynne Barker

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?

$$\frac{(250 \text{ mg})(10 \text{ mL})}{(1000 \text{ mg})} = 2.5 \text{ mL}$$

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

$$\frac{(160 \text{ mg})(2 \text{ mL})}{(100 \text{ mg})} = 3.2 \text{ mL}$$

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

$$1.5 \text{ g} = 1500 \text{ mg} \quad \frac{1500(1)}{500} = 3 \quad \boxed{6 \text{ tablets}}$$

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

$$200 \text{ mcg} = 0.2 \text{ mg} \quad \frac{0.2(1)}{0.2} = 1 \text{ tablet}$$

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?

$$\begin{aligned} 0700 - 0900 &= (2)(50) = 100 \\ 0900 - 0930 &= 125 + 25 = 150 \\ 0900 - 1900 &= 9(50) = 450 \end{aligned} \quad \boxed{700 \text{ mL}}$$

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?

$$\text{child weight} = 19.1 \text{ kg} = 28.65 \text{ mg} \quad \frac{28.65(1)}{75} = 0.38 \text{ mL}$$

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

$$\begin{aligned} 17.1 \text{ mg} &= 17,100 \text{ mcg} \\ 17,221 \text{ mcg} &= 17.2 \text{ mg} \\ \frac{(17.2 \text{ mg})(223)}{17.1} &= 224.3 \text{ mL/hr} \end{aligned}$$

$$0.2 \text{ L} = \frac{2000}{10} \text{ mL}$$

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?

$$\frac{\text{Volume} \times \text{drop factor}}{\text{time (min)}} = \frac{2000(59)}{462} = 255.4 \text{ gtts/min}$$

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

$$22,000,000 \text{ mcg} = 22 \text{ g} \quad \frac{24(12)}{22} = 13.1 \text{ mL}$$

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?

$$\frac{392(74)}{582} = 49.8 \text{ gtts/min}$$

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?

$$\begin{array}{l} 0700 - 0900 : 200 \\ 0900 - 1000 : 75 + 50 = 125 \\ 1000 - 1500 : 500 \\ 1500 - 1600 : 125 \\ 1600 - 1800 : 200 \end{array} \quad 1,150 \text{ mL}$$

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

$$7 \text{ g} = 0.007 \text{ kg} \quad \frac{(0.007)(20)}{0.016} = 8.8 \text{ mL}$$

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?

$$24 \text{ g} = 0.024 \text{ kg} \quad \frac{0.024(1)}{0.016} = 1.5 \text{ tablets} \approx 2$$

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?

$$\begin{array}{l} 3 \text{ mcg} = 0.003 \text{ mg} \\ 82(0.003) = 0.246 \\ \frac{0.003(129)}{23.8} = \frac{0.246(129)}{23.8} = 1.3 \text{ mL/hr} \end{array}$$

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

$$30 \text{ mg} = 0.03 \text{ g}$$

$$\frac{0.06(1)}{0.03} = \boxed{2 \text{ tablets}}$$