

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?

$$D = 250 \text{ mg} \\ H = 1 \text{ g} \rightarrow 1000 \text{ mg} \quad U = 10 \text{ mL} \\ \frac{D}{H} (U) \rightarrow \frac{250 \text{ mg}}{1000 \text{ mg}} (10 \text{ mL}) = \boxed{2.5 \text{ mL}}$$

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

$$D = 160 \text{ mg} \\ H = 100 \text{ mg} \quad U = 2 \text{ mL} \\ \frac{D}{H} (U) \rightarrow \frac{160 \text{ mg}}{100 \text{ mg}} (2 \text{ mL}) = \boxed{3.2 \text{ mL}}$$

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

$$D = 1.5 \text{ g} \\ H = 500 \text{ mg} \rightarrow \text{g} = \text{"S to L"} = 500 = 0.5 \text{ g} \quad U = \text{Tablet} \\ \frac{D}{H} (U) \rightarrow \frac{1.5 \text{ g}}{0.5 \text{ g}} (1 \text{ tablet}) = 3 \text{ tablets/dose} \\ 24 \text{ hrs} / 12 = 2, 2 (3 \text{ tablets}) = \boxed{6 \text{ /day}}$$

4. Ergotrate maleate 200 mcg is ordered po daily. Available is 0.2 mg.

How many tablets should the nurse administer?

$$D = 200 \text{ mcg} \\ H = 0.2 \text{ mg} \rightarrow 200 \text{ mcg} = \text{"L to S"} = 0.2 = 200 \text{ mcg}, \quad U = \text{tablets} \\ \frac{D}{H} (U) \rightarrow \frac{200 \text{ mcg}}{200 \text{ mcg}} (1 \text{ tablet}) = \boxed{1 \text{ tablet}}$$

= 12 Hrs ✓

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?

Intercepted:

$$\text{unintercepted} = 50 \text{ mL} (12 \text{ hrs}) = 600 \text{ mL} \\ \text{intercepted} = 50 \text{ mL} (1 \text{ Hr}) = 50 \text{ mL} \\ 600 \text{ mL} + 125 \text{ mL} = \boxed{675 \text{ mL}}$$

$$42 \text{ lbs} / 2.2 \text{ kg} = 19.09 \approx \underline{19.1 \text{ kg}}$$

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?

$$1.5 \text{ mg/kg} (19.1 \text{ kg}) = 28.65 \approx 28.7 \text{ mg} \\ D = 28.7 \text{ mg} \\ H = 75 \text{ mg} \quad U = 1 \text{ mL} \\ \frac{D}{H} (U) \rightarrow \frac{28.7 \text{ mg}}{75 \text{ mg}} (1 \text{ mL}) = 0.382 \dots \approx \boxed{0.4 \text{ mL}}$$

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 in mL/hr.

$$17221 \text{ mcg} \rightarrow \text{mg} \rightarrow \text{"S to L"} = 17.221 = 17.2 \text{ mg} \\ 17.2 \text{ mg} / 17.1 \text{ mg} = 1.0058 \dots \\ 1.0058 \dots (223 \text{ mL}) = 224.304 \approx \boxed{224.3 \text{ mL/Hr}}$$

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?

$$0.2 \text{ L} \rightarrow 200 \text{ mL} \\ 200 \text{ mL} / 462 \text{ min} = 0.4329 \dots \\ 0.4329 \dots (59 \text{ gtts/mL}) = \boxed{25.54 \text{ gtts/min}}$$

200 mL / 462 min x 59 gtts/mL

0.2 L → 200 mL = 4 to 5
0.2 = 200 mL